



TVAAS
A Data Tool for
Continuous Improvement
Superintendent Study Council Conference

September 15, 2015

Guiding Questions

- What's new with TVAAS? – Updates and Resources...
- How can TVAAS be used to diagnose the academic needs of all students? – Maryville City Schools
- How can TVAAS inform instructional decision making at the district, school, and classroom level? – Knox County Schools

TVAAS Updates – Reporting Color Scheme

- Consistent and updated color scheme for reporting:
 - Updated “level 3” to signal that this is *meeting expectations*, as opposed to bordering on marginal performance.

Value Added Color	District and School Growth Measure Compared to the Growth Standard	Index*	Interpretation
Level 5 – Most Effective	At least 2 standard errors above	2.00 or greater	Significant evidence that students exceeded the Growth Standard.
Level 4 – Above Average Effectiveness	Between 1 and 2 standard errors above	Between 1.00 and 2.00	Moderate evidence that students exceeded the Growth Standard.
Level 3 – Average Effectiveness	Between 1 standard error above and 1 standard error below	Between -1.00 and 1.00	Evidence that students met the Growth Standard.
Level 2 – Approaching Average Effectiveness	Between 1 and 2 standard errors below	Between -2.00 and -1.00	Moderate evidence that students did not meet the Growth Standard.
Level 1 – Least Effective	More than 2 standard errors below	Less than -2.00	Significant evidence that students did not meet the Growth Standard.

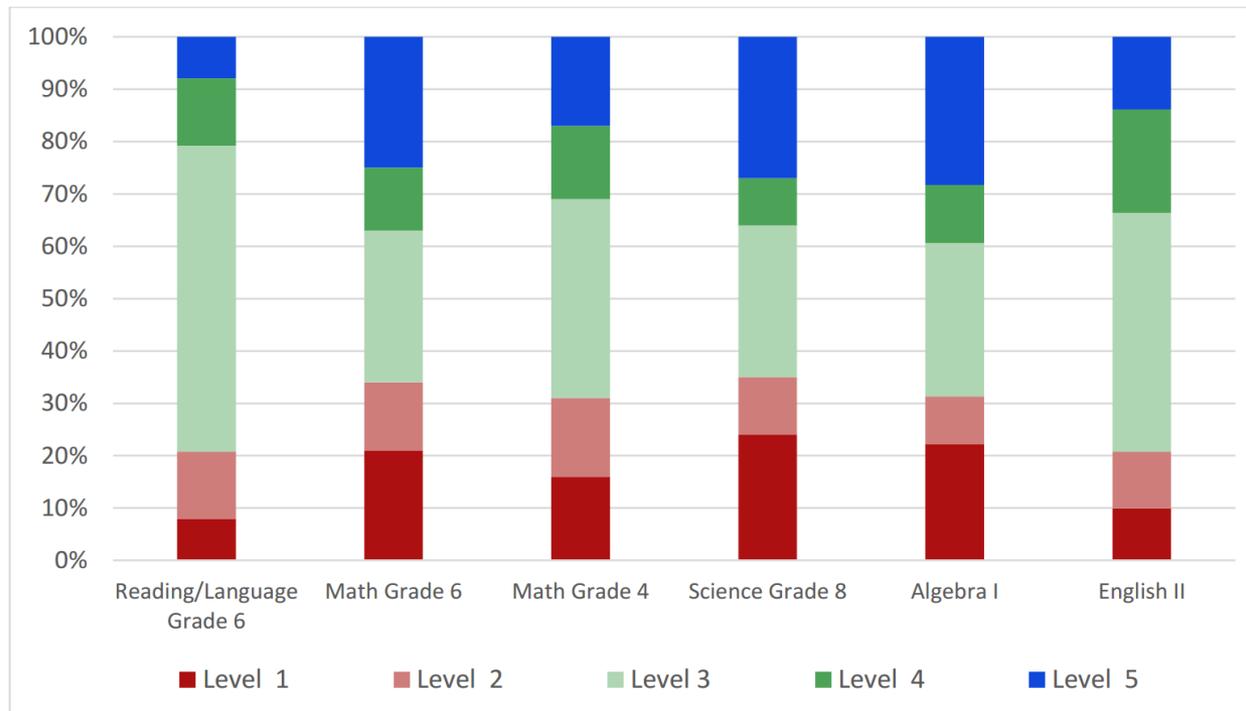
NOTE: When an index falls exactly on the boundary between two colors, the higher growth color is assigned.

*These rules for effectiveness levels and growth colors apply to all index values in the district, school, and teacher reports.

TVAAS Updates – Intra-year Approach

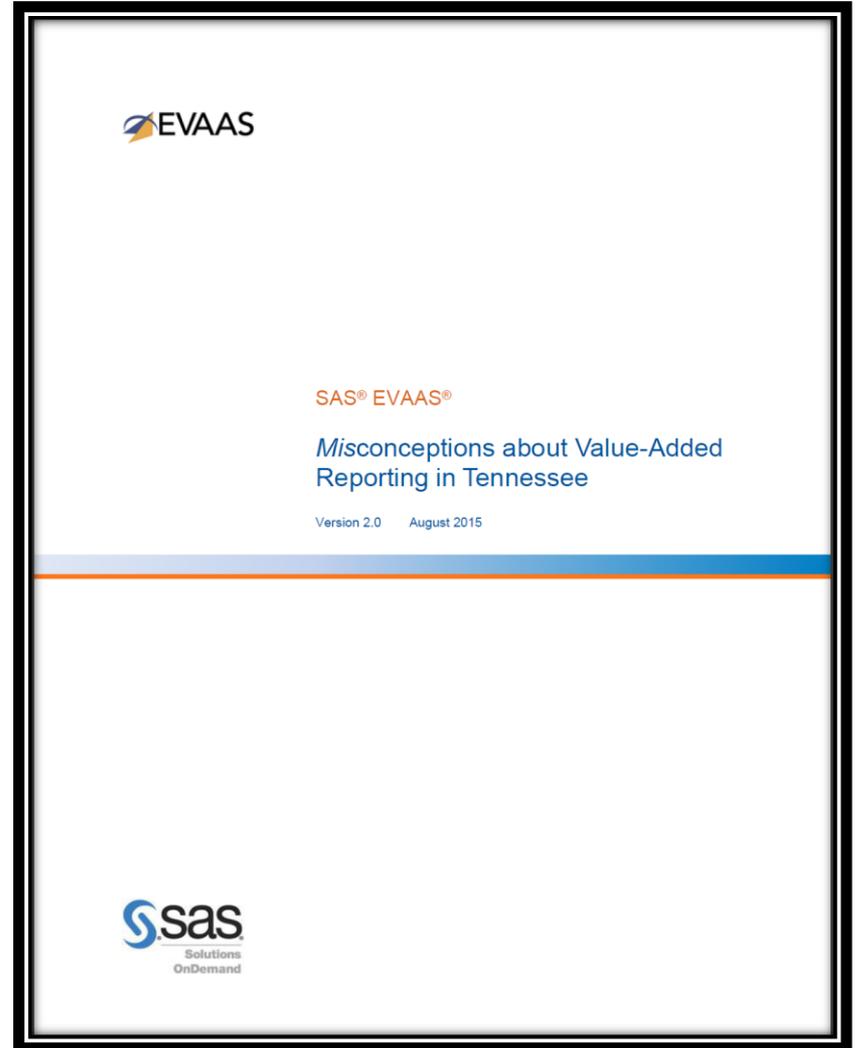
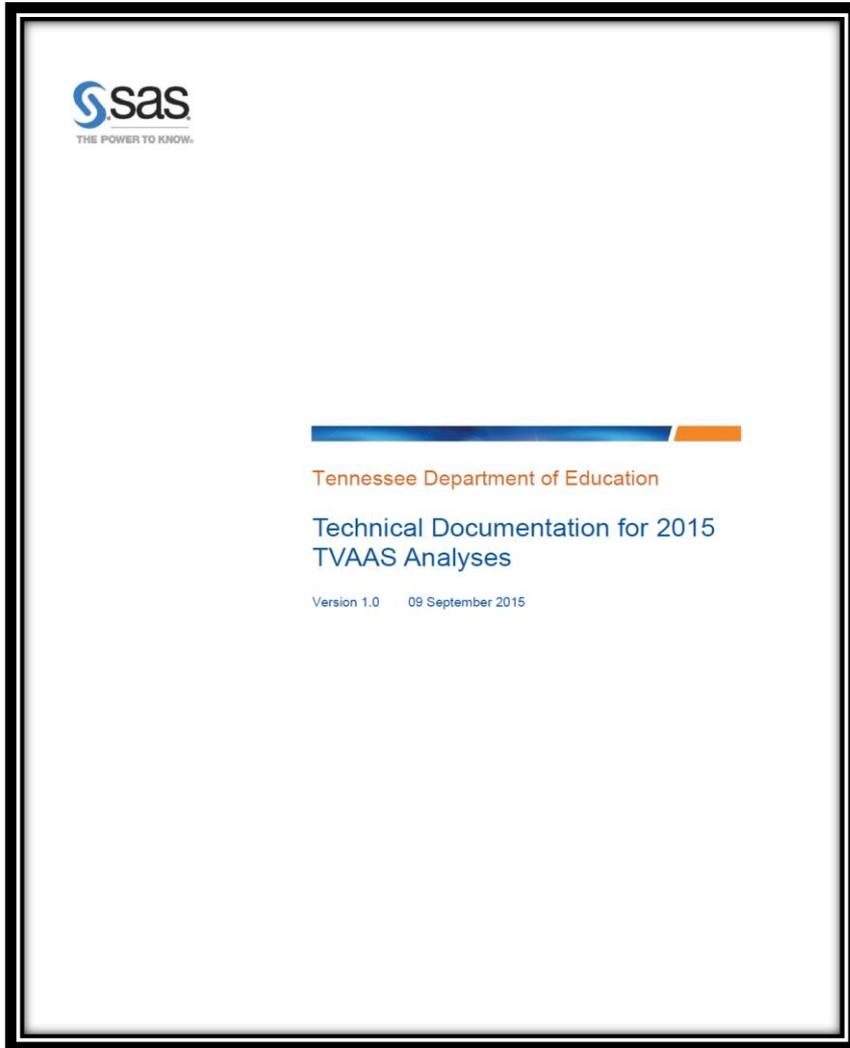
- Change to intra-year approach in 2014-15. No longer using 2009 base-year for grades 4-8.
 - Intra-year approach does not create a forced distribution. Distributions tend to be balanced around a level 3.

FIGURE 8: DISTRIBUTION OF TEACHER EFFECTIVENESS LEVELS BY SUBJECT AND GRADE



** Source: *Misconceptions about Value-Added Reporting in Tennessee Version 2.0 August 2015*

TVAAS Updates – New & Updated Resources



TVAAS Updates – Training Opportunities

- LEAD Pre-Conference for School Leaders -
<http://www.tn.gov/education/topic/lead-conference>
 - **Foundations of TVAAS** (delivered by SAS): This session will focus on providing school leaders with a solid foundational understanding of all the primary TVAAS reports and how to leverage these reports for instructional improvements.
 - **Advanced TVAAS Discussion** (delivered by SAS): This session will increase participants' understanding of TVAAS with more technical information and build upon their ability to effectively discuss TVAAS with other school leaders and teachers within their building.
- LEAD Conference Sessions –
 - **Understanding TVAAS – Methodology and Reporting** (CORE Data Analysts to deliver)
 - **TVAAS Reporting – Beyond Levels 1 – 5 – Making the Most of the SAS TVAAS Website** (CORE Data Analysts to deliver)



TM

Maryville City Schools

Performance Data

We cannot prescribe if we do not have the skills to diagnose – to diagnose we need the ability to analyze the symptoms.

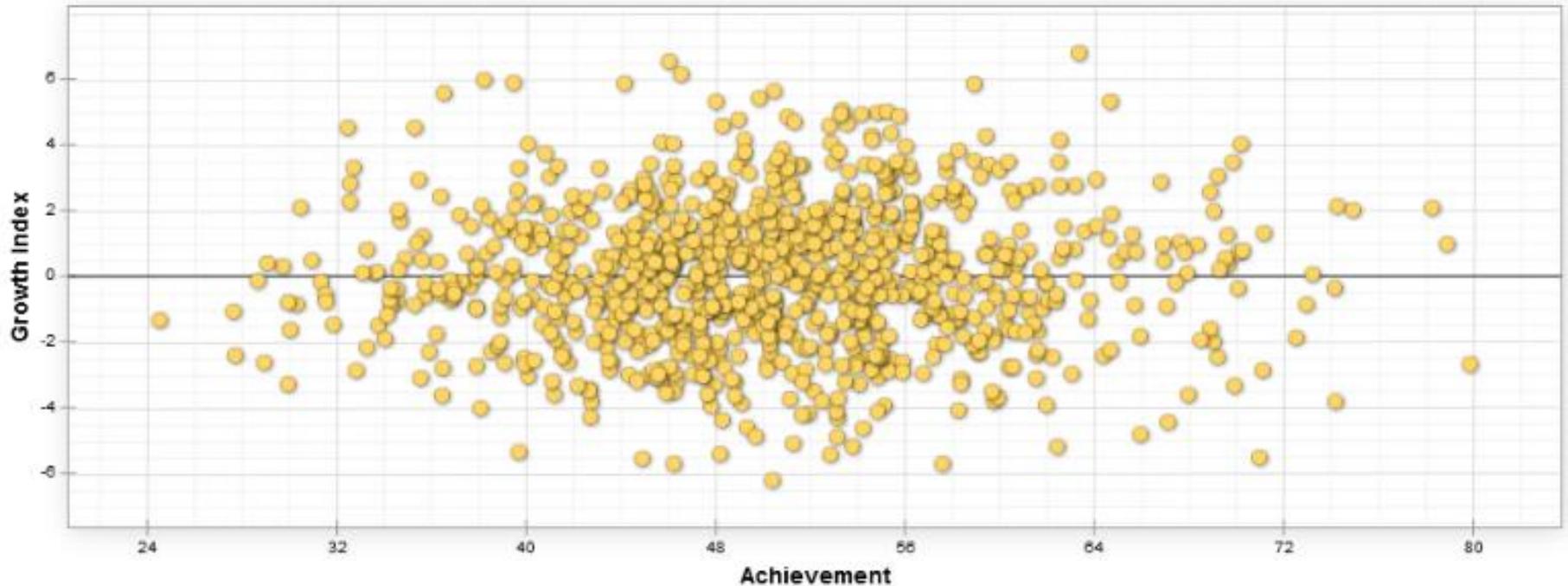
Reeves

Growth versus Achievement – 4th Grade ELA

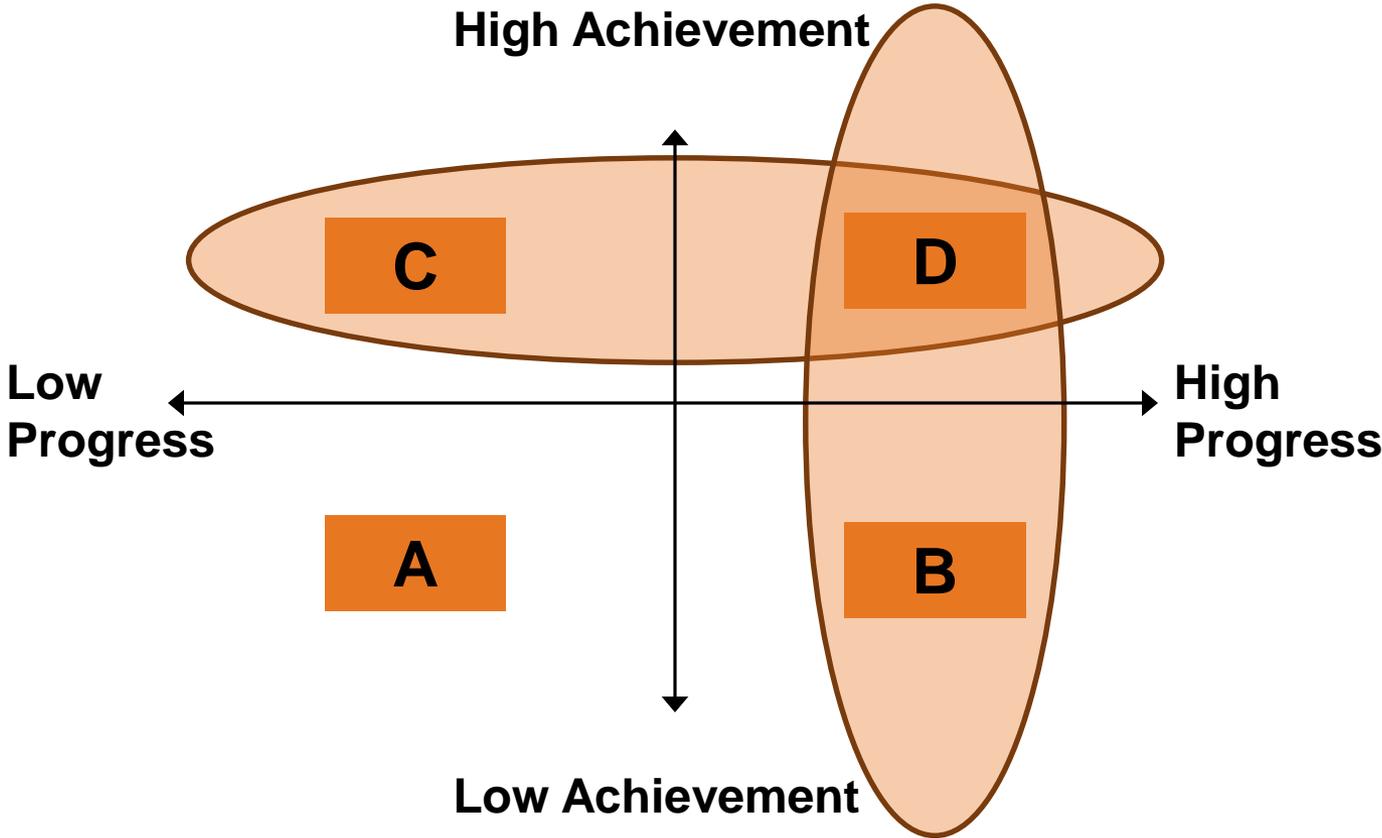
Growth vs Achievement

Growth Index vs Achievement

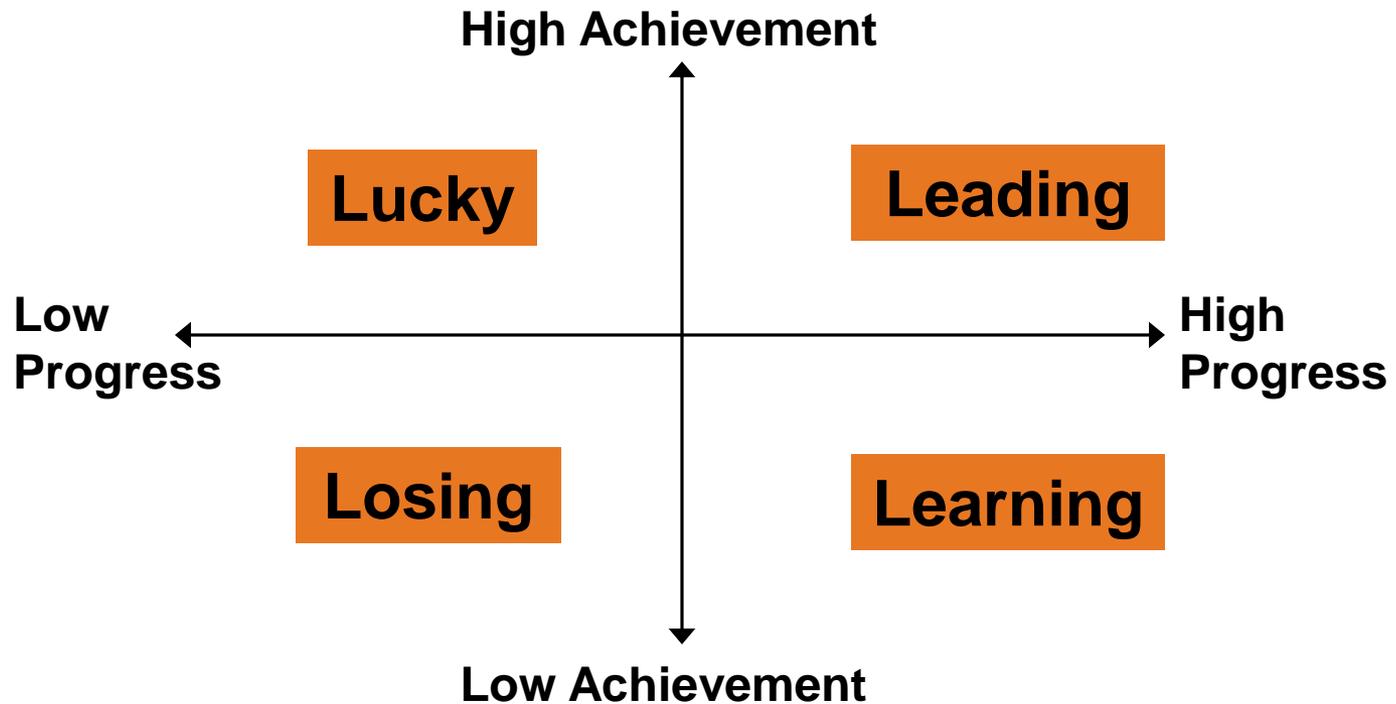
This selection shows the relationship between growth and students' achievement level. The pattern you see can provide insight into the effects of educational practices and policies in your area. SAS EVAAS analyses show no significant correlation between students' growth and their achievement level. Therefore, whether students begin the year as low, middle or high achieving, they are all equally likely to make good progress.



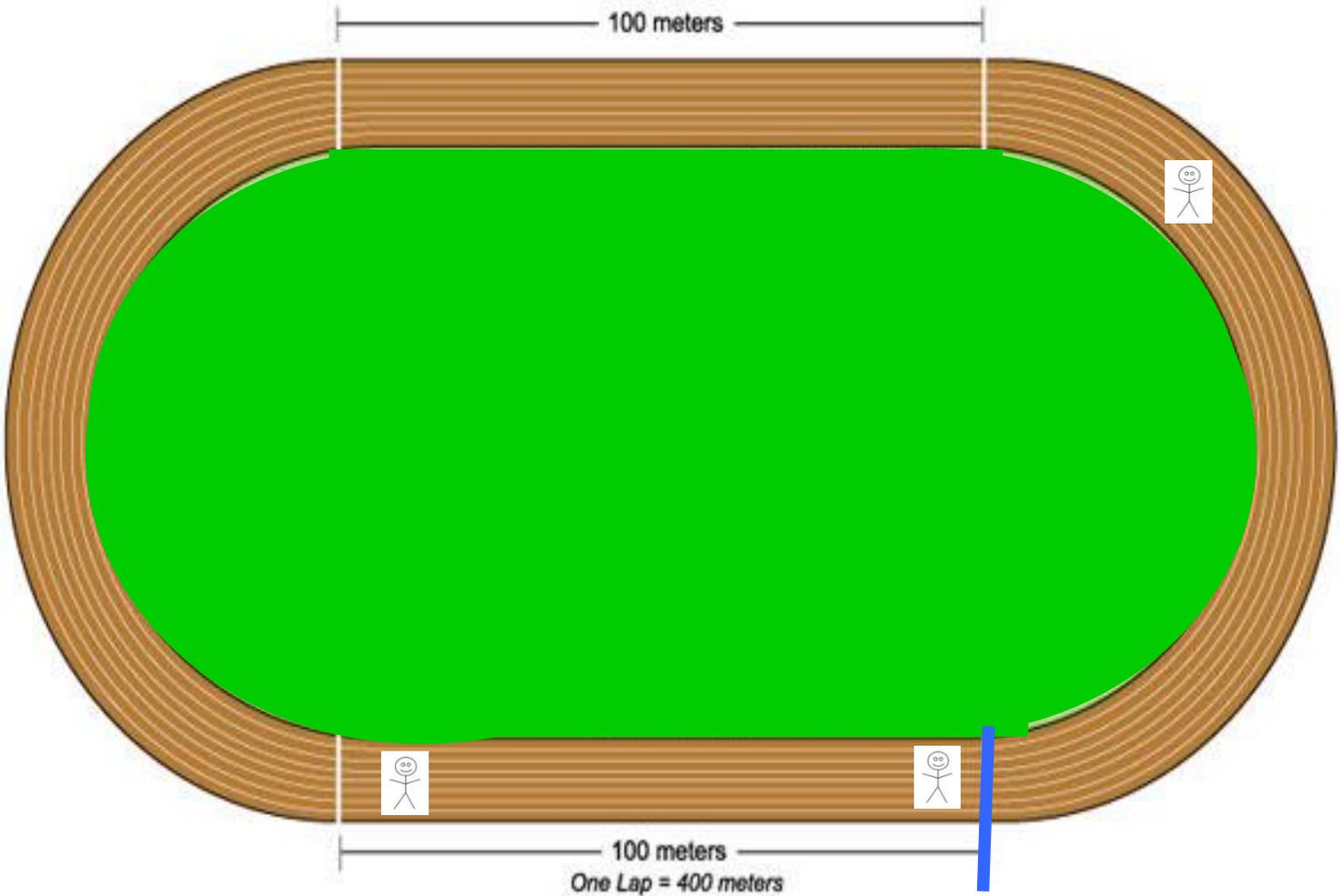
Academic Achievement and Growth



Reeves Leadership Model



Growth Expectation



Key Questions

Are we meeting the academic needs of all students?

- Does the curriculum fit the students?
- Do the instructional strategies work?
- Is the school structure conducive to student learning?

TVAAS Decision Dashboard

Select items below to see them above.

Test/Grade	Subject	School Value Added		School Diagnostic - Achievement Groups				
		2015	3 Year Average	1 (Lowest)	2	3 (Middle)	4	5 (Highest)
EOC <input type="checkbox"/>	Algebra I							
	Algebra II							
	English II							
	English III							
	Biology I							
	Chemistry							

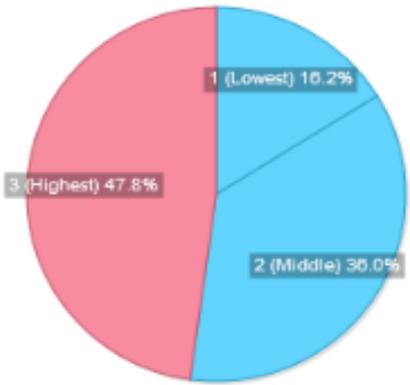
School Value Added

- Significant evidence that students in the School made more progress than the Growth Standard
- Moderate evidence that students in the School made more progress than the Growth Standard
- Evidence that students in the School made progress similar to the Growth Standard
- Moderate evidence that students in the School made less progress than the Growth Standard
- Significant evidence that students in the School made less progress than the Growth Standard
- No data currently available

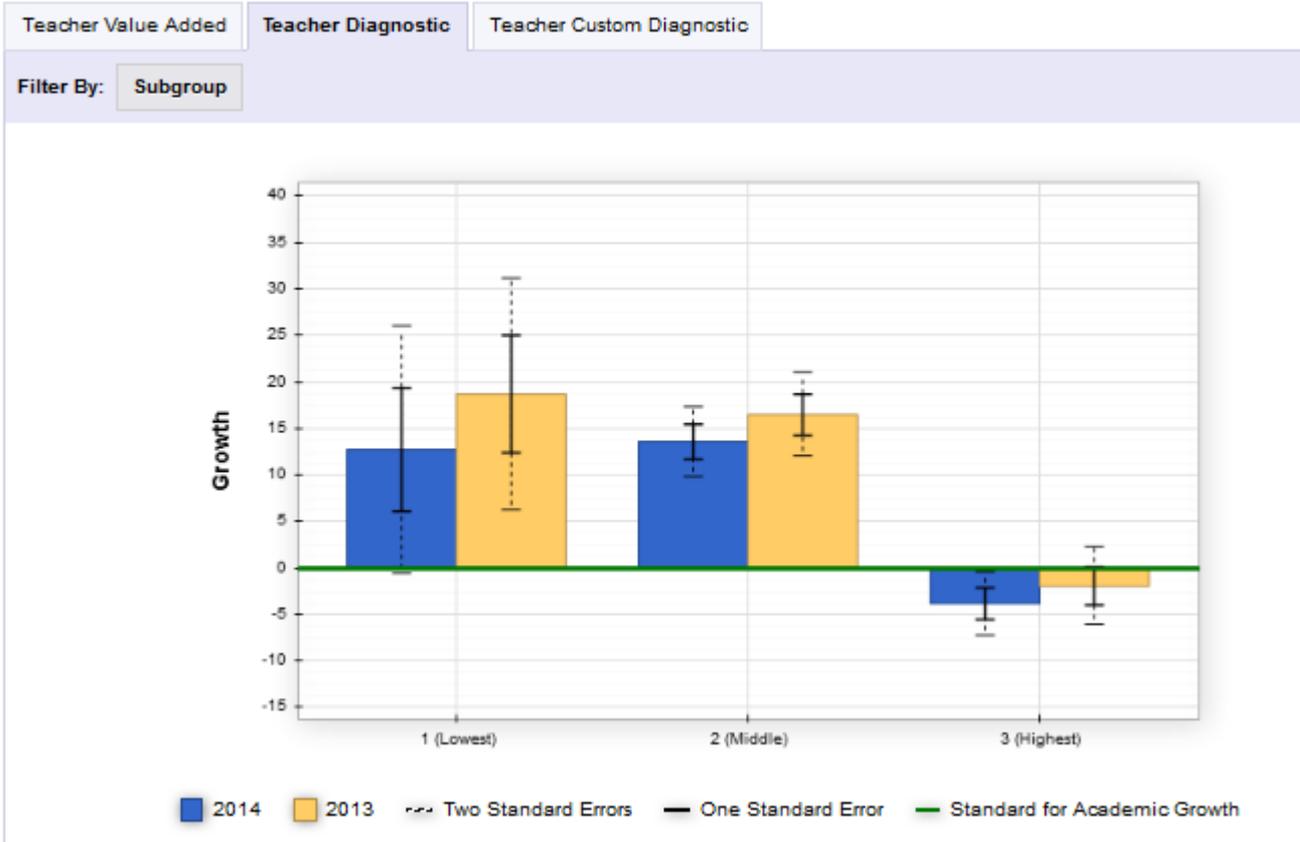
School Diagnostic

- Moderate evidence that the group exceeded the Growth Standard
- Evidence that the group met the Growth Standard
- Moderate evidence that the group did not meet the Growth Standard
- There were not enough students to define growth.

Teacher Diagnostic



2015 Achievement Groups



Formative Assessment

Report: School (Single Grade) Future Academic Performance

School: Maryville High School

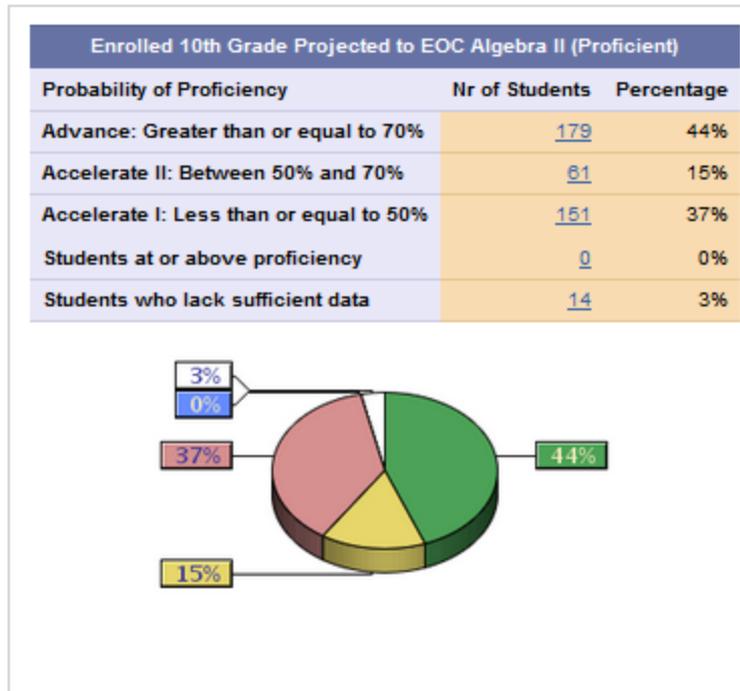
District: Maryville

Year: 2014

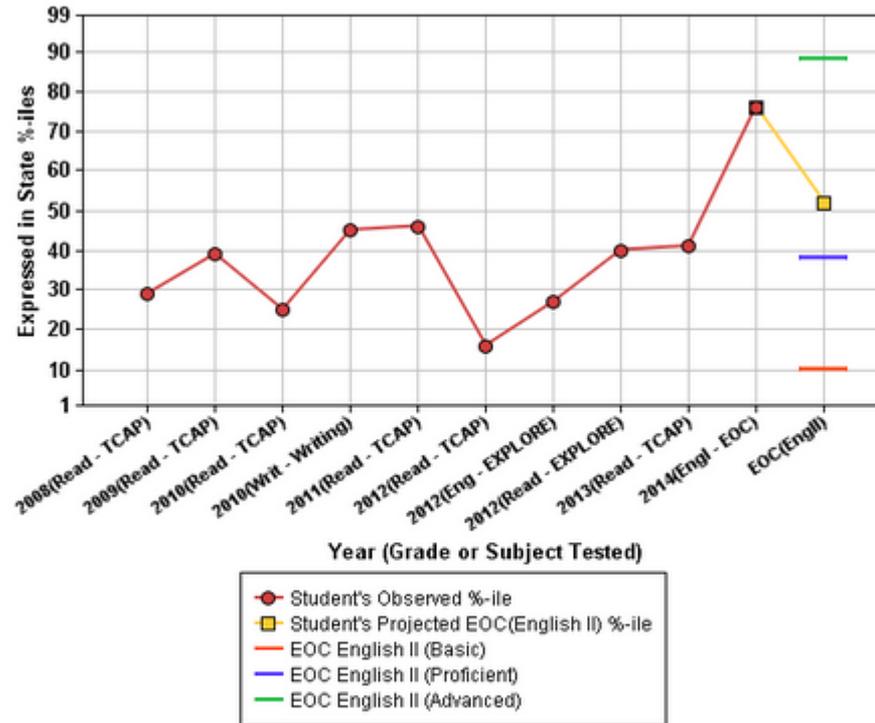
Grade: 10th Grade

Projection: EOC Algebra II (Proficient)

Select Subgroups



Student Projection



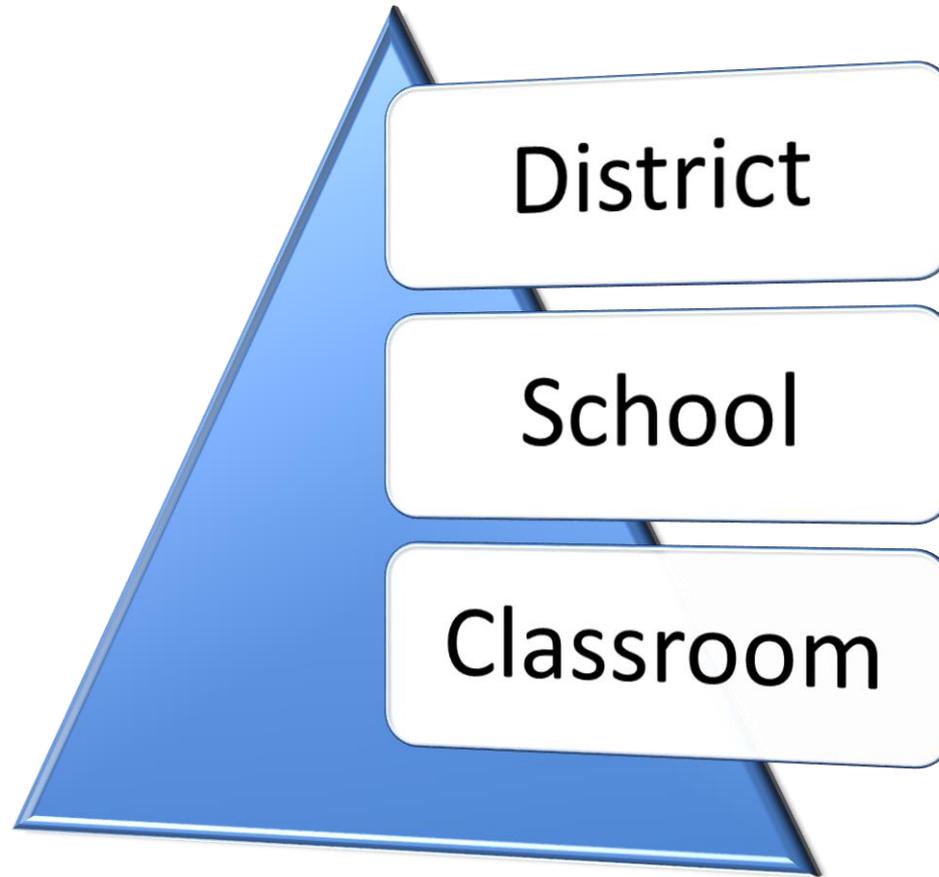
Projection: EOC English II			
Projected State Percentile	Probability of scoring the Indicated Performance Level or above		
	Basic	Proficient	Advanced
52	97.5%	66.2%	11.6%



TM

Knox County Schools

Levels of Instructional Decision Making



District Level

District

School

Classroom

- Instructional Planning – subject/grade/school level trends, quintile trends
 - Curriculum and resources
 - Professional learning
 - Prioritization of system wide support

2014-2015 Grades 3-8 Science

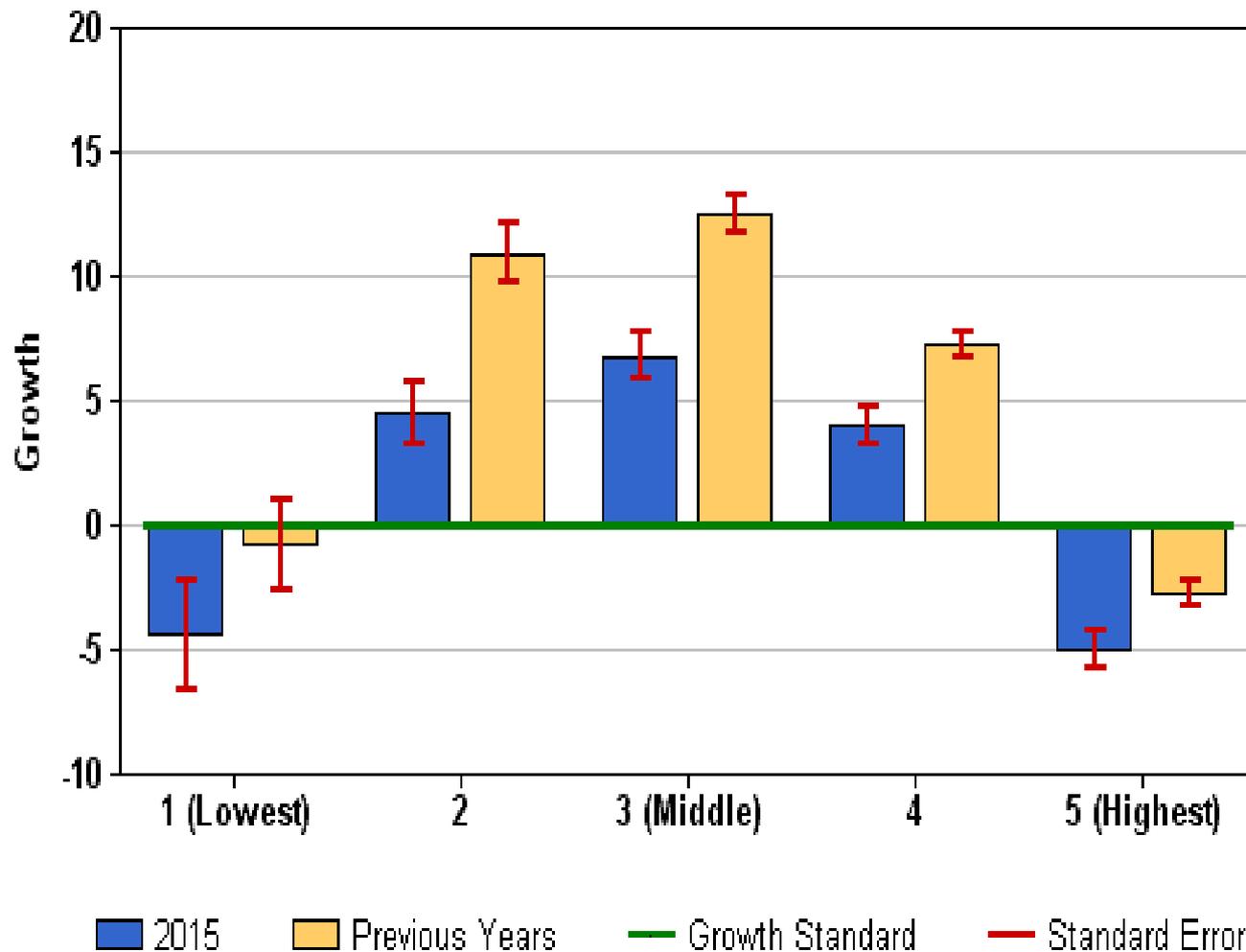
Grade	Estimated District Growth Measure						Growth Measure over Grades Relative to	
	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>Growth Standard</u>	<u>State</u>
<u>Growth Standard</u>		0.0	0.0	0.0	0.0	0.0		
<u>State 3-Yr-Avg</u>								
<u>2013 Growth Measure</u>								
<u>Standard Error</u>								
<u>2014 Growth Measure</u>								
<u>Standard Error</u>								
<u>2015 Growth Measure</u>		0.2 LG	0.3 G	5.9 B	-0.3 LR	-0.3 LR	1.2	
<u>Standard Error</u>		0.2	0.2	0.2	0.2	0.2	0.1	
<u>3-Yr-Avg Growth Measure</u>								
<u>Standard Error</u>								

We view district subject diagnostic data in quintiles

District

School

Classroom



District Level

District

School

Classroom

- Research, Evaluation and Assessment
 - **Student percentiles** – data point for school/student decision making
 - **Normal Curve Equivalents (NCEs)** – look for patterns, trends, predict report card grades, program evaluation
 - **Actionable Data** – Help schools translate data into action through Data Days and generating individualized school data presentations

We track NCEs and use them to project grades by Schools

District

School

Classroom

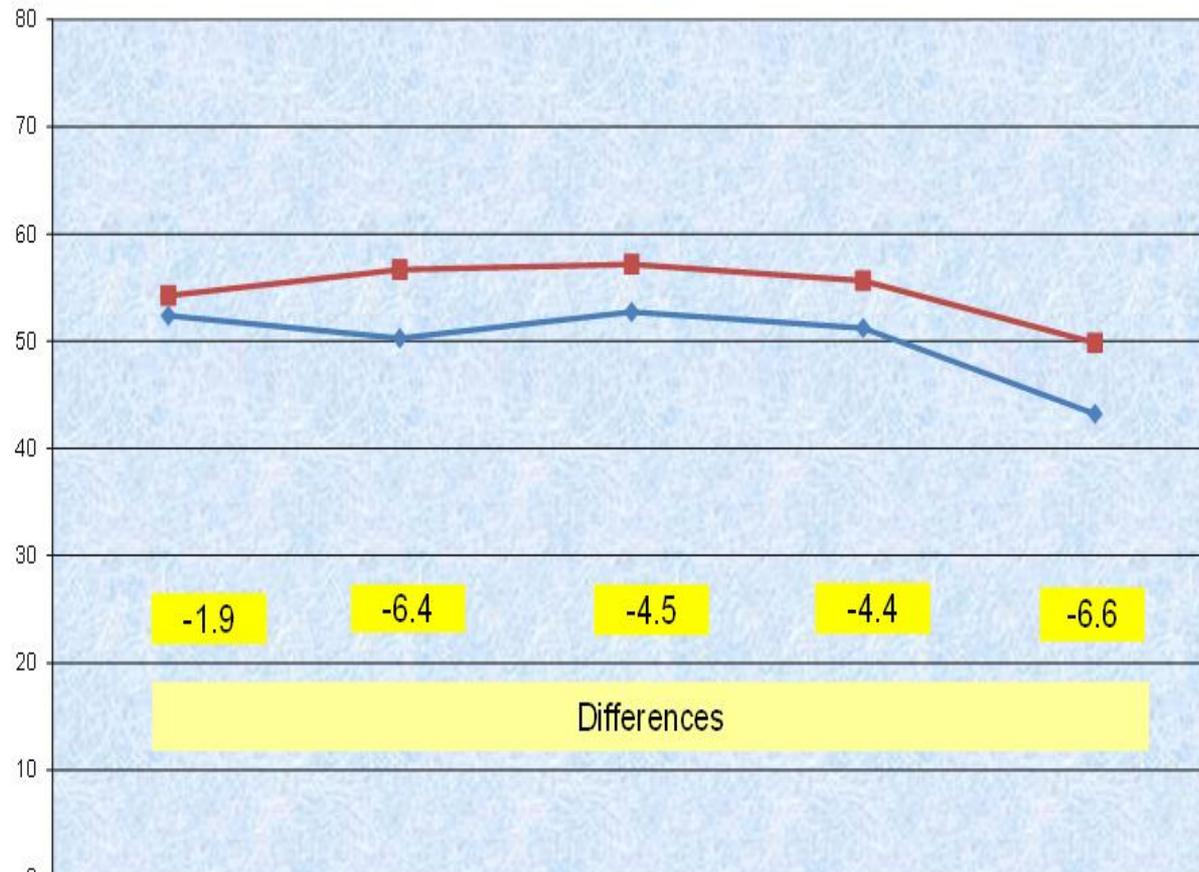
Mathematics Grades 3 to 5 Mean NCE Trends

Projected 3-Year
Mean NCE:

49.0

Projected
Achievement Report
Card Grade:

C



	2011	2012	2013	2014	2015
◆ Belle Morris Elementary	52.4	50.3	52.7	51.2	43.2
■ Knox County Elementary	54.2	56.7	57.2	55.6	49.8

We inform schools how they did on their Annual Measurable Objectives (AMO)

District

School

Classroom

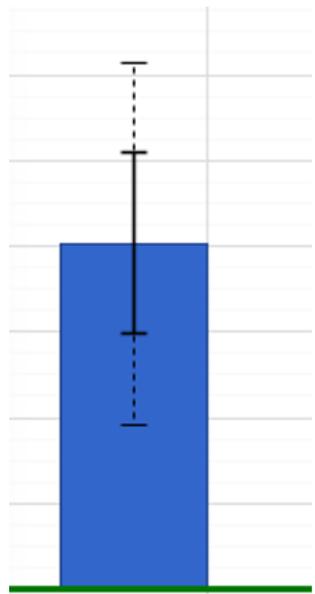
Karns Middle School				
Achievement	AMO Targets 2014 - 2015	Results 2014 - 2015	MET?	IF MET, HOW?
3rd - 8th RLA	69.0%	64.7%	✓	TVAAS
3rd - 8th Math	60.9%	63.4%	✓	AMO
7th RLA	68.5%	63.4%	✓	TVAAS
7th Math	62.8%	62.2%	✓	Confidence Interval

TVAAS Level Helper

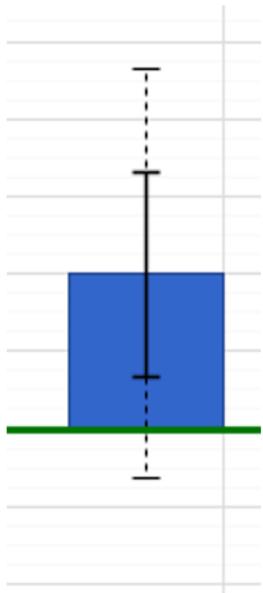
District

School

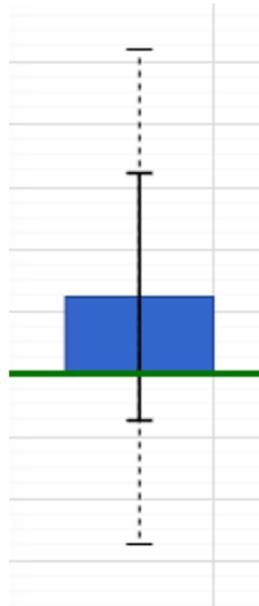
Classroom



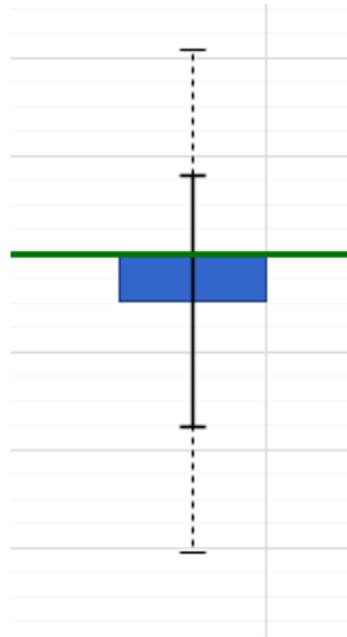
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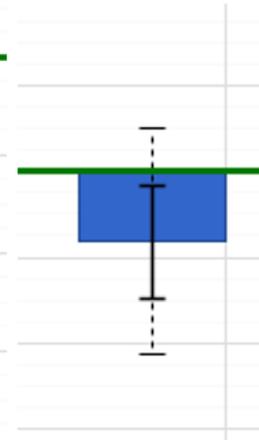
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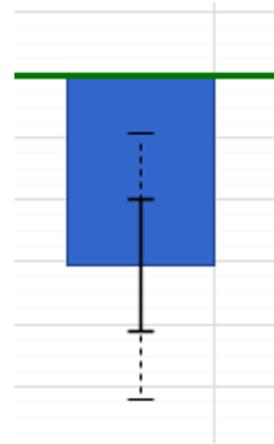
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3 ↓



2



1

Personnel Decisions

District

School

Classroom

- Personnel Decisions – individual teacher TVAAS
 - Teacher leadership roles (master/mentor teachers, instructional coaches, lead teachers, PD specialists)
 - District leadership roles (instructional supervisors, specialists, facilitators)



School Level Planning

District

School

Classroom

- School Improvement Planning: KCS STAR (School Teams Achieve Results) Plan
- Prioritization of resources:
 - Master scheduling_– teacher/student assignment
 - Interventions
 - Budget/Alignment of resources
- Quintile Diagnostic Report
- Cohort trends
- School Comparison Report

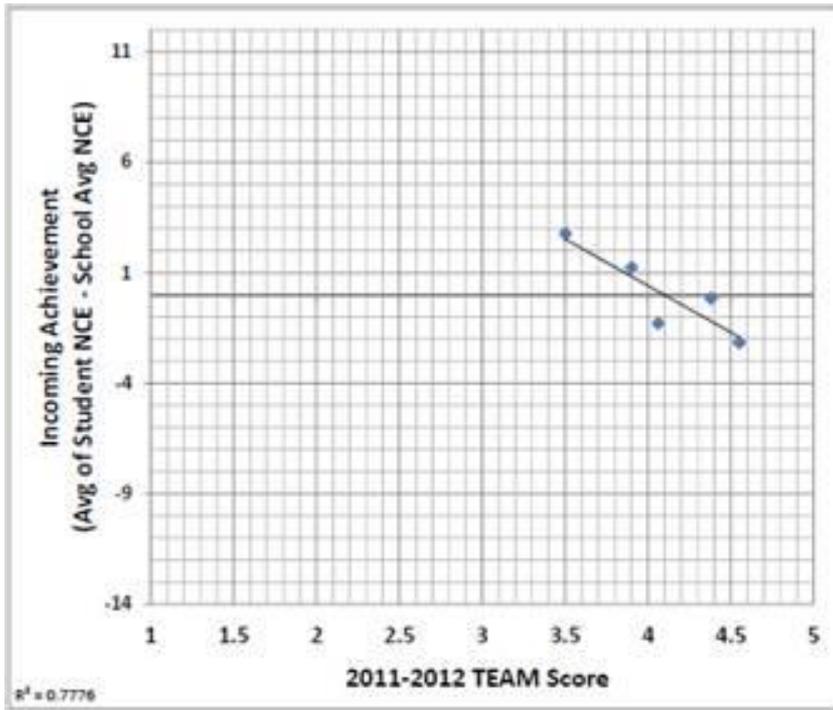
Student/Teacher Assignment

District

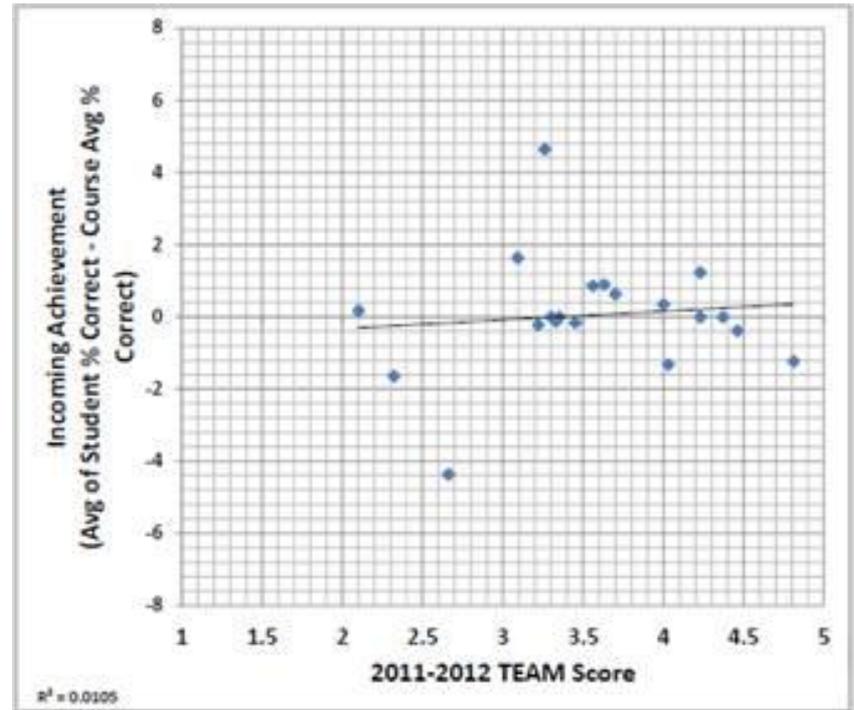
School

Classroom

Assigning higher performing teachers to lower achieving classes



No defined strategy for class assignment



We compare growth against schools with similar demographics

District

School

Classroom

West Valley Middle School in Knox County

School Information			
Min Tested Grade	6	Max Tested Grade	8
% Economically Disadvantaged	15	% Minority	17
% Tested ELL	0	% Tested SpED	9
Nr of Students Tested	1252		

Comparison Schools

For TCAP Science (4th-8th Grade Current Year)

All schools in TVAAS with at least one tested grade in common with the reference school

With % Economically Disadvantaged between 0 and 30 and % Minority between 0 and 30

change search remove restrictions 

The search returned 38 schools

Average Growth Index (AGI) = 0 : On average, the students in this school met the Growth Standard.

Average Growth Index (AGI) > 0 : A larger AGI provides more evidence that, on average, students in this school exceeded the Growth Standard.

Average Growth Index (AGI) < 0 : The farther the AGI is below 0, the more evidence there is that, on average, students in this school did not meet the Growth Standard.

School	District	Average Growth Index	Quintile					
			Grade 6		Grade 7		Grade 8	
			Achv	Growth	Achv	Growth	Achv	Growth
 West Valley Middle School	Knox County	7.0	5	5	5	2	5	3
 Central Magnet School	Rutherford County	10.7	5	5	5	4	5	5
 Mount Juliet Middle School	Wilson County	8.6	5	4	5	3	5	5
 T.W. Hunter Middle School	Sumner County	7.6	5	4	4	4	5	5
 West Valley Middle School	Knox County	7.0	5	5	5	2	5	3
 Grassland Middle School	Williamson County	5.9	5	4	5	5	5	2
 Farragut Middle School	Knox County	5.4	5	5	5	3	5	3
 Karns Middle School	Knox County	4.0	5	5	5	3	5	2
 Spring Station Middle School	Williamson County	3.4	5	5	5	3	5	2
 Fred J Page Middle School	Williamson County	3.2	5	4	5	5	5	2
 Maryville Junior High School	Maryville City	3.2					5	4

School Level Personnel Decisions

District

School

Classroom

- KCS Instructional Coaching Model

- Professional Learning Communities (PLC)

- Individual Learning Cycle (ILC)

- Beginning of Year Conferences

SY1415 TEAM Relative Rankings

TLN	Educator Name	School Name	Observation Score	Professionalism Score	Achievement Score	Growth Score	Ind. TVAAS	Summative Score	Adjusted Summative	Relative Rank for Coaching
			2.91	3	3	3	NA	294.6	291	1
			2.49	3	5	3	3	304.5	304.5	2
			3.06	3.5	5	3	NA	333.6	306	3
			4.14	4.5	5	1	1	317	317	4
			3.22	3.5	5	3	NA	343.2	322	5
			3.26	3.25	3	3	NA	315.6	326	6
			3.63	4.75	3	3	3	331.5	331.5	7
			3.4	3.25	3	3	NA	324	340	8
			3.43	4.75	3	3	NA	325.8	343	9
			3.48	3.25	3	3	NA	328.8	348	10
			3.48	3.75	3	3	NA	328.8	348	11
			3.49	3.5	5	3	NA	359.4	349	12
			3.51	4	5	3	NA	360.6	351	13
			3.51	4	3	3	NA	330.6	351	14
			3.54	4	3	3	NA	332.4	354	15
			3.57	3.5	5	3	NA	364.2	357	16
			3.54	3.75	5	3	3	357	357	17
			3.59	4	5	5	NA	415.4	359	18
			3.6	4	5	3	NA	366	360	19
			3.6	5	5	5	NA	416	360	20
			3.63	4.5	3	3	NA	337.8	363	21
			3.63	5	3	3	NA	337.8	363	22

Assistance with BOY conferences

District

School

Classroom

Blue Grass Elementary School

Beginning of Year (BOY) Conference – Fall 2015

Teacher's Name:		Date:	
Example Teacher			
14-15 Scores			
Category	Measure	Score	Points
60% Overall Observation	Observation Scores	4.2	252
25% Growth Score	School-wide Literacy TVAAS Composite	3	75
15% Achievement Score	School-wide Literacy and Numeracy Achievement	3	45
		Total Score	372
		Effectiveness Rating	4
Score Range:	Overall Effectiveness Rating	Effectiveness Descriptor	
<200	1	Significantly Below Expectations	
200 - 274.99	2	Below Expectation	
275 – 349.99	3	At Expectations	
350 – 424.99	4	Above Expectations	
425 – 500	5	Significantly Above Expectations	
Other Notes from 2014-2015:			

Classroom Level (Teacher & Student)

District

School

Classroom

- Looking back – *scatterplot and diagnostic*
- Looking forward – *new projection file*
- *Individual teacher diagnostic*



TVAAS Teacher Custom Diagnostic & Scatterplot

District

School

Classroom

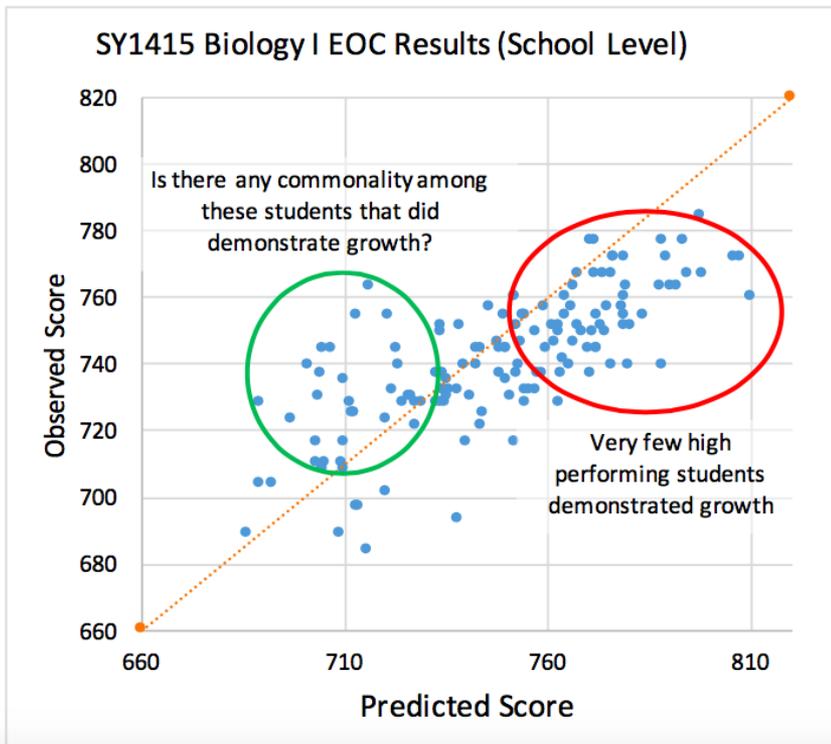
Teacher Value Added Teacher Diagnostic **Teacher Custom Diagnostic**

Filter By: Subgroup

Create

Student	2013 State NCE	2014 State NCE	Avg State NCE	2014 Percentile	Perf Level
	51	59	55.0	64	P
	34	33	33.5	21	B
	58	40	49.0	31	B
	84	61	72.5	67	P
	7	9	8.0	5	BB
	17	9	13.0	5	BB
	74	76	75.0	85	P
	62	58	60.0	60	P

Data from TVAAS Custom Diagnostic

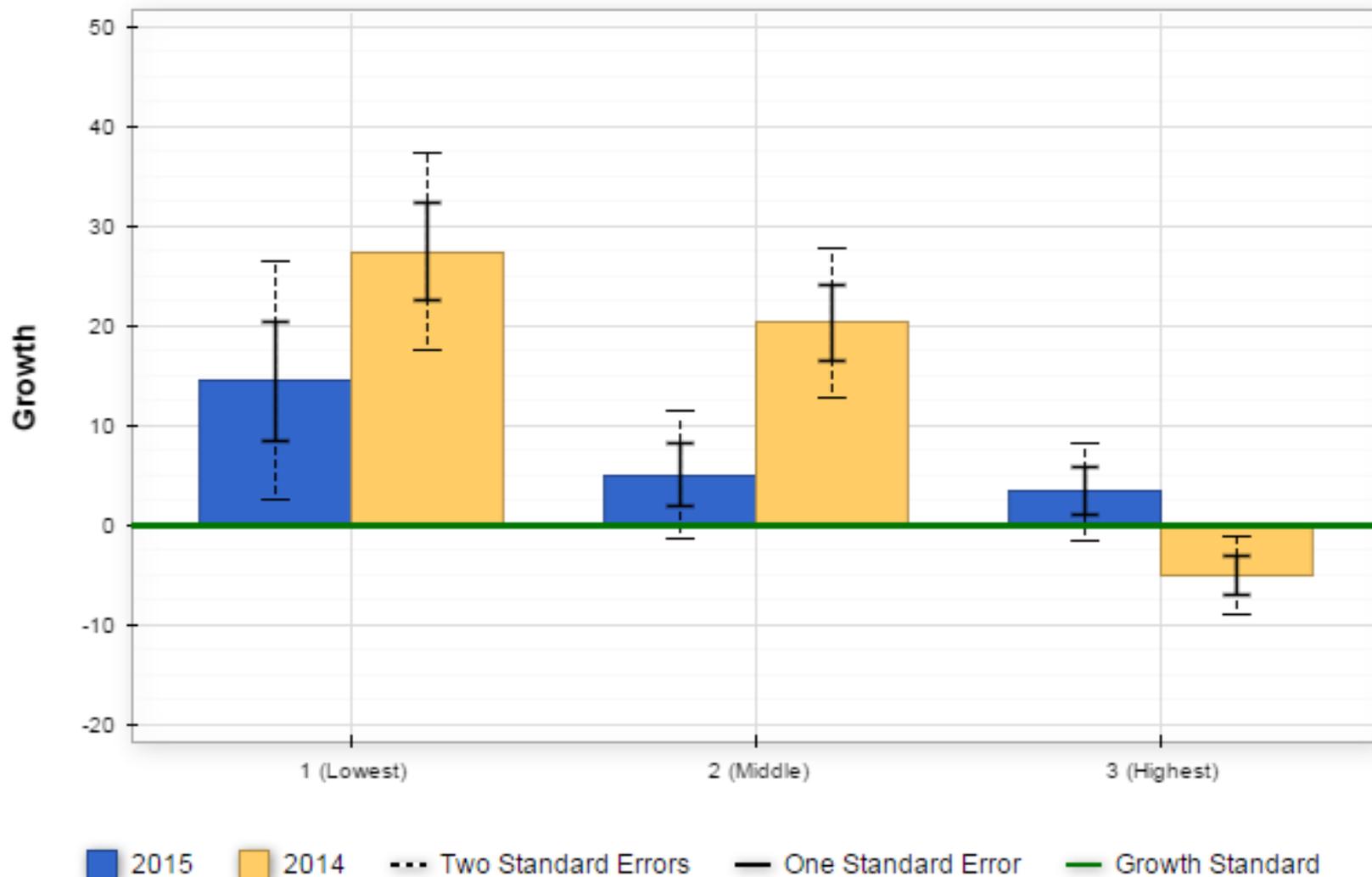


We view individual teacher diagnostic data in tertiles

District

School

Classroom



2015

2014

Two Standard Errors

One Standard Error

Growth Standard

We link TVAAS Projections to Student Schedules

District

School

Classroom

Current School	Teacher	Student	Subject	Projected State Percentile	Probability of Attaining the 50th Percentile	Probability of Attaining the 80th Percentile
School XYZ	Teacher A	Student 1	6th TCAP Math	13	1.6	0.1
School XYZ	Teacher A	Student 2	6th TCAP Math	61	69.2	19.6
School XYZ	Teacher A	Student 3	6th TCAP Math	81	92.8	54.2
School XYZ	Teacher A	Student 4	6th TCAP Math	74	86.2	39.3
School XYZ	Teacher A	Student 5	6th TCAP Math	59	65	16.5
School XYZ	Teacher A	Student 6	6th TCAP Math	88	97.2	71.2
School XYZ	Teacher A	Student 7	6th TCAP Math	75	86.4	39.7
School XYZ	Teacher A	Student 8	6th TCAP Math	68	77.8	27.6
School XYZ	Teacher A	Student 9	6th TCAP Math	28	13.6	0.7
School XYZ	Teacher A	Student 10	6th TCAP Math	57	61.5	14.3
School XYZ	Teacher A	Student 11	6th TCAP Math	21	6.7	0.2
School XYZ	Teacher A	Student 12	6th TCAP Math	73	84.6	36.7
School XYZ	Teacher A	Student 13	6th TCAP Math	17	3.1	0.1
School XYZ	Teacher B	Student 1	6th TCAP Math	82	93.3	55.4
School XYZ	Teacher B	Student 1	6th TCAP Math	24	8.4	0.3
School XYZ	Teacher B	Student 2	6th TCAP Math	14	2	0.1
School XYZ	Teacher B	Student 3	6th TCAP Math	83	93.7	56.8
School XYZ	Teacher B	Student 4	6th TCAP Math	48	46.7	7.5
School XYZ	Teacher B	Student 5	6th TCAP Math	96	99.9	96.5
School XYZ	Teacher B	Student 6	6th TCAP Math	59	64.3	16
School XYZ	Teacher B	Student 7	6th TCAP Math	32	19.5	1.3
School XYZ	Teacher B	Student 8	6th TCAP Math	6	0.1	0.1
School XYZ	Teacher B	Student 9	6th TCAP Math	38	28.7	2.7



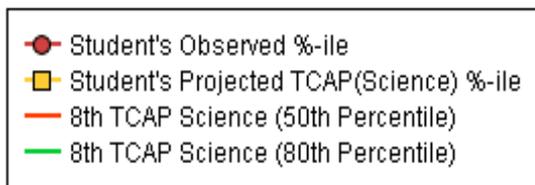
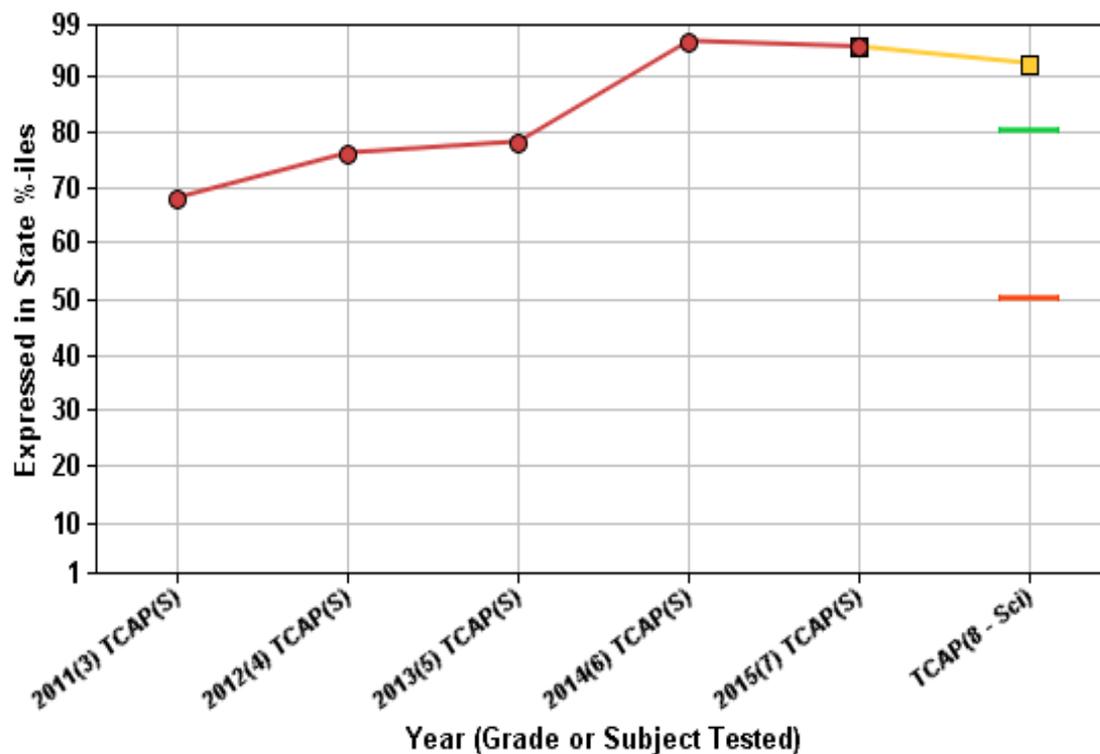
We view individual student trends and projections

District

School

Classroom

Projection: 8th TCAP Science



For More Information

District

School

Classroom

Dr. James McIntyre, Superintendent

Knox County Schools

(865) 594-1620

Curriculum and Instruction

Dr. Elizabeth Alves, Chief Academic Officer

Ms. Millicent Smith, Executive Director

Research, Evaluation and Assessment

Mr. John Beckett, Director



TM

Questions