

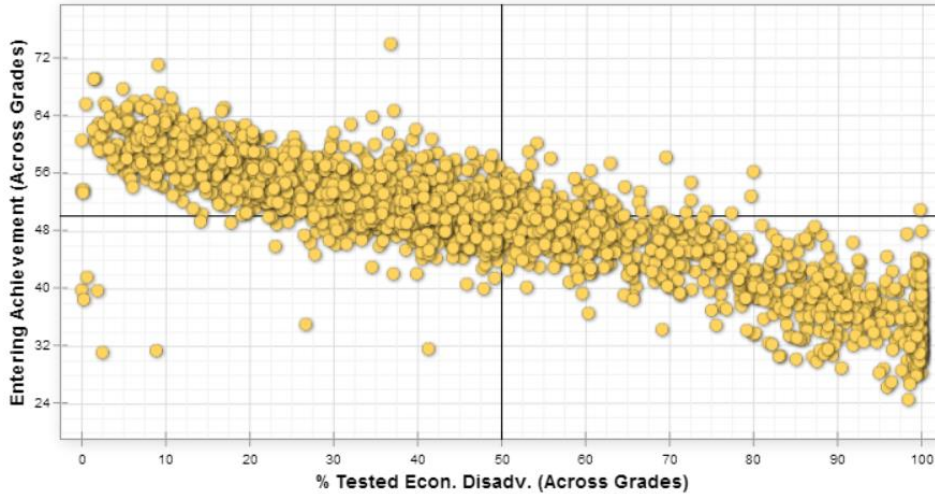
MEASURING STUDENT GROWTH IN VIRGINIA

VIRGINIA BOARD OF EDUCATION COMMITTEE ON SCHOOL & DIVISION ACCOUNTABILITY
NADJA YOUNG, M.ED., NCBT, EDUCATION SPECIALIST, SAS INSTITUTE
MARCH 25, 2015

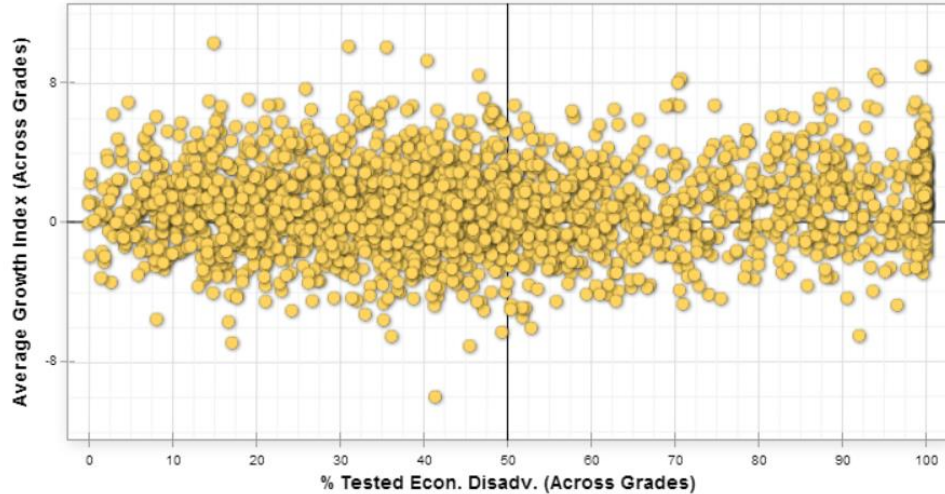


THE POWER OF TWO A MORE COMPLETE PICTURE OF STUDENT LEARNING

Achievement

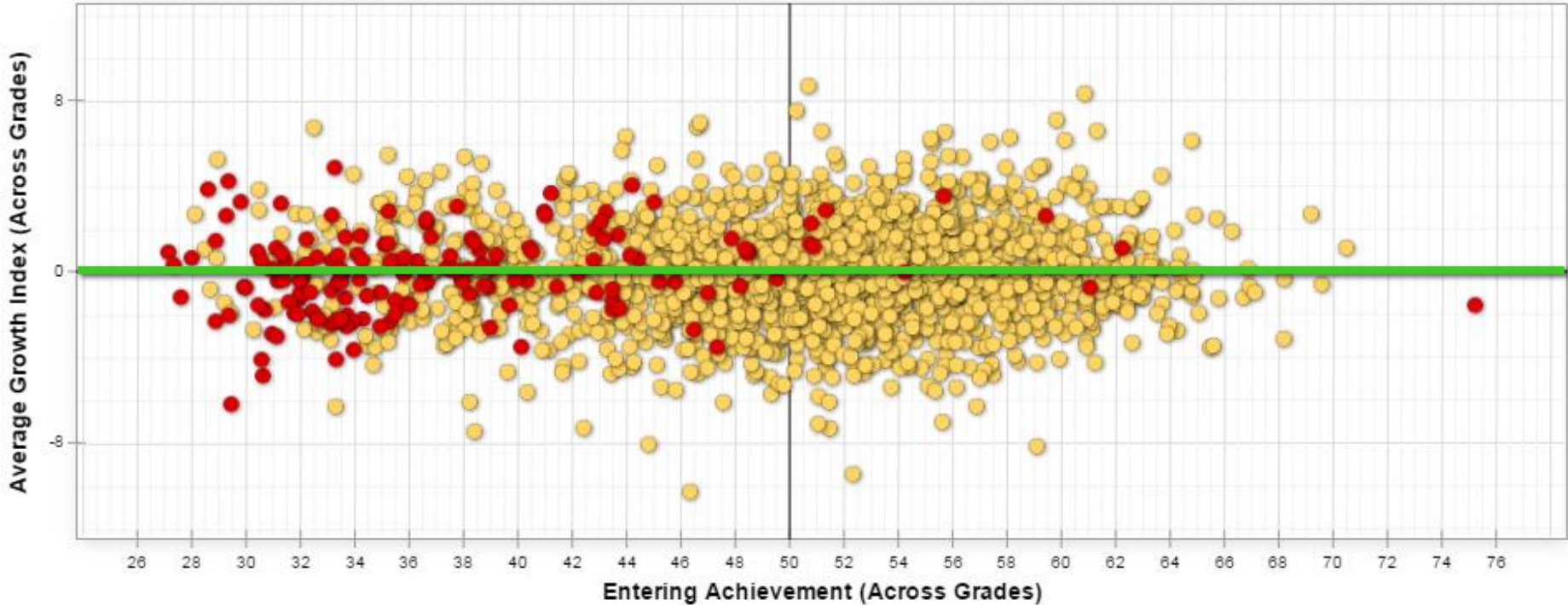


Growth



Source: www.pvaas.sas.com Public Pennsylvania 2012 - 2013 data by school for PSSA Reading across grades.
Each dot is a school in PA.

THE POWER OF TWO A MORE COMPLETE PICTURE OF STUDENT LEARNING

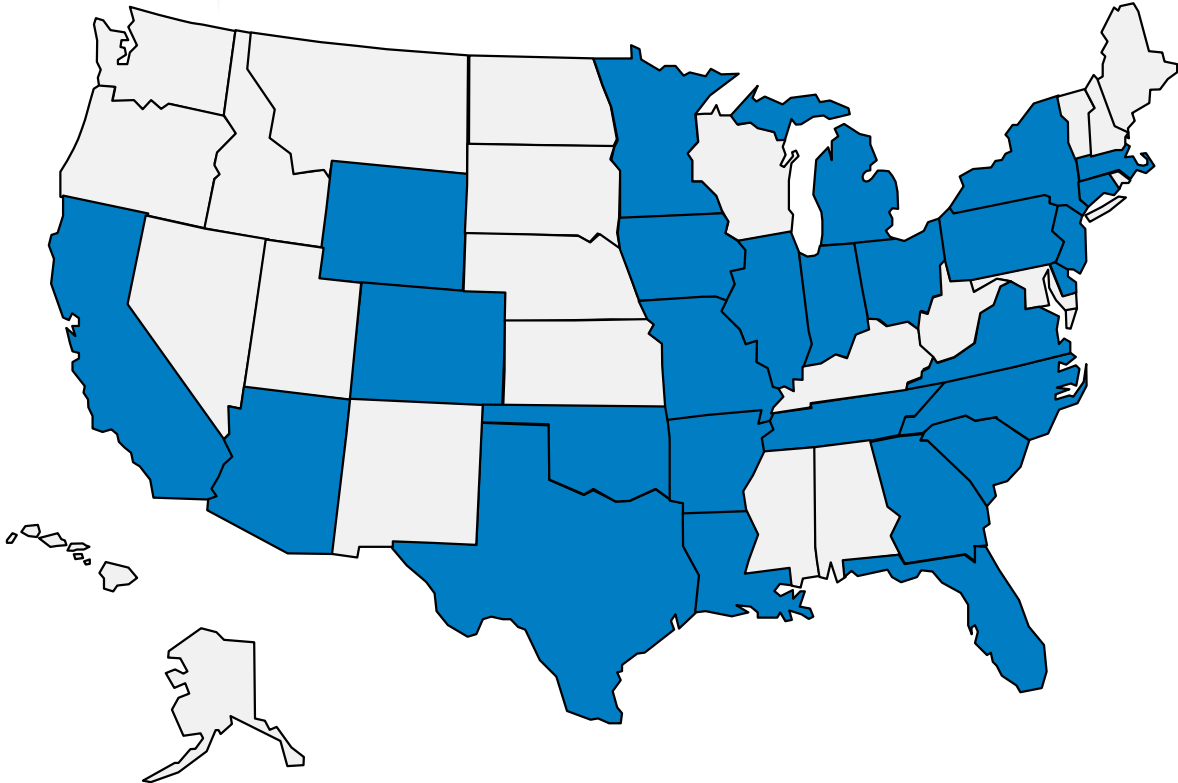


Source: www.pvaas.sas.com Public Pennsylvania 2013-2014 data by school for PSSA Reading across grades. Each dot is a school in PA. Red dots represent Philadelphia City School District.

MEASURING STUDENT GROWTH

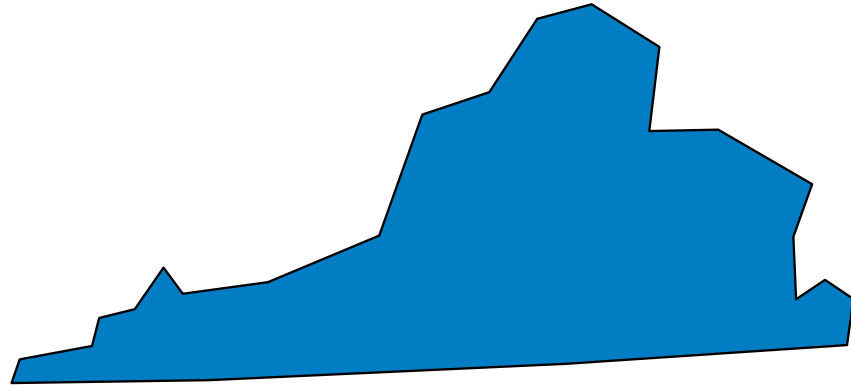
- Simple gains, value tables, student growth percentiles, value-added models...
- Selected approach depends on:
 - Intended use
 - School & instructional improvement vs. accountability
 - Assessment landscape
 - Statewide standardized vs. local and formative
- If being used for any high stakes purposes, the growth model needs sufficient rigor to be fair, valid, and reliable to educators and students.

SAS EVAAS



EVAAS IN VIRGINIA | DIVISION PARTNERSHIPS

- Salem City since 2009
- Goochland County
- Bedford County
- Franklin City
- Gloucester
- Middlesex
- Surry
- Sussex



Value-Added Models

- Uses all prior achievement data across grades and subjects
- Includes more students- even those with missing data
- Includes more tests- SOLs, NRTs, local and college readiness tests
- Continuous across testing changes
- Recognizes growth of all students

Value Tables

- Uses two prior data points in single subject (measurement error concern)
- Excludes students missing immediate prior test score
- Based solely on consecutive Math/Reading 3-8
- Require vertically-aligned tests
- Only recognizes growth across levels

- Statewide (SOLs)
- Local (Interactive Achievement Student Growth Assessments)
- National Norm Referenced Tests (NRTs such as the NWEA MAP)
- College Readiness (PSAT, SAT, ACT)
- Early learning K-3
- Locally developed assessments that meet criteria
- Performance based assessments that meet criteria

1. A high correlation with curricular objectives
2. Sufficient stretch in the testing scale
3. Sufficient reliability in the scale from year to year for a grade or subject



Reports

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Custom Reports

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- [Student Search](#)
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District Reports

- [Value Added](#)
- [Diagnostic](#)
- [Perf Diagnostic](#)

Summary Reports

- [Value Added](#)
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School Reports

- [Decision Dashboard](#)
- [Value Added](#)
- [Diagnostic](#)
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Teacher Effectiveness Reports

- [Teacher Search](#)
- [Teacher List by School](#)
- [State Teacher Summary](#)
- [Evaluation Dashboard Teacher List](#)
- [State Roster Verification Summary](#)

Administrator Effectiveness Reports

- [Evaluation Dashboard Administrator List](#)

Other Reports

- [Student Pattern Report](#)
- [Feeder Pattern Report](#)
- [District Academic Preparedness Report](#)
- [School Academic Preparedness Report](#)

District: kT

VALUE-ADDED REPORT SAMPLE

FOCUSING FIRST ON A SINGLE SCHOOL'S GROWTH

Report: **School Value Added** Test: **End of Grade**
 School: **Koichi Wakata Middle School** Subject: **Math**
 District: **Wild Watermelon Schools**
 Year: **2012**



LEARN HOW TO USE THIS REPORT *(Flash required)*

[Gain Model](#) | [Predictive Methodology](#)

Estimated School Mean NCE Gain				
Grade	6	7	8	Mean NCE Gain over Grades Relative to Growth Standard
Growth Standard	0.0	0.0	0.0	
2010 Mean NCE Gain				
Std Error				
2011 Mean NCE Gain				
Std Error				
2012 Mean NCE Gain	<u>-3.3 R</u>	<u>0.1 G</u>	<u>1.8 B</u>	<u>-0.5 G</u>
Std Error	0.8	0.7	0.7	0.5
3-Yr-Avg NCE Gain				
Std Error				
Estimated School Mean NCE Scores				
Grade	6	7	8	
NCE Base	50.0	50.0	50.0	
2009 Mean				
2010 Mean				
2011 Mean	52.0	52.2	52.9	
2012 Mean	52.4	52.1	54.0	

B	Exceeds Expected Growth: Estimated mean NCE gain is above the growth standard by at least 2 standard errors.
G	Meets Expected Growth: Estimated mean NCE gain is below the growth standard by at most 2 standard errors but less than 2 standard error above it.
R	Does Not Meet Expected Growth: Estimated mean NCE gain is below the growth standard by more than 2 standard errors.

To view additional reports, click on the underlined numbers or words.

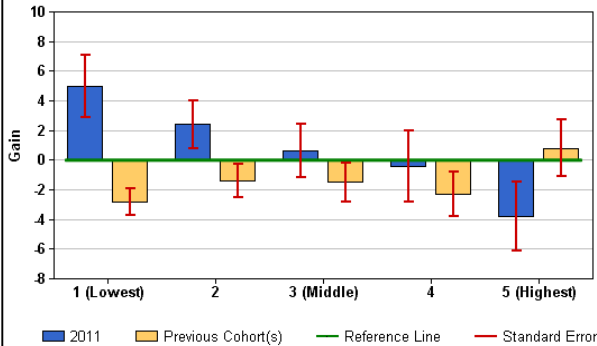
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DIAGNOSTIC SAMPLE REPORT

DIGGING DEEPER TO LOOK FOR TRENDS

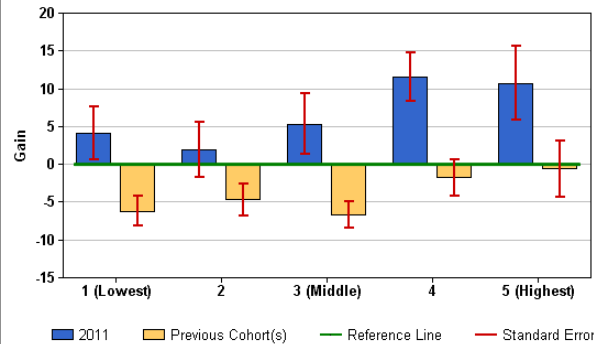
Report: School Diagnostic Test: TCAP
 School: Rainey Middle School Subject: Math
 System: Large Urban School District Grade: 7th Grade
 Year: 2011

[Select Subgroups](#)



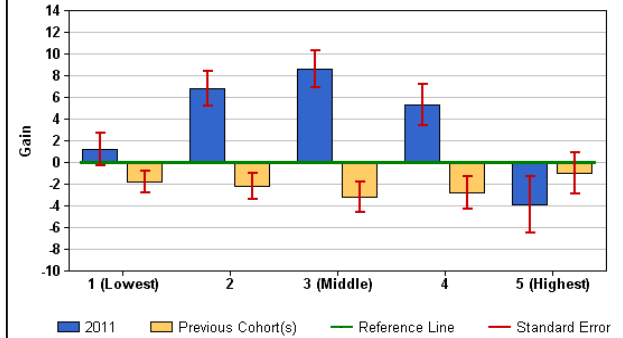
Report: School Diagnostic Test: TCAP
 School: Potts Elementary School Subject: Math
 System: Large Urban School District Grade: 4th Grade
 Year: 2011

[Select Subgroups](#)



Report: School Diagnostic Test: TCAP
 School: Rainey Middle School Subject: Math
 System: Large Urban School District Grade: 8th Grade
 Year: 2011

[Select Subgroups](#)



VALUE-ADDED REPORT SAMPLE

COMPARING SCHOOLS WITHIN A DISTRICT

Estimated School Mean NCE Gain by Grade						
School Name		4	5	6	7	8
John P. Mena Elementary School	3-Yr-Avg	--	--	--	--	--
John Mortimer Warfield Middle School	2012	--	--	-4.5	-0.8	-0.7
	3-Yr-Avg	--	--	--	--	--
John Ogonowski Middle School	2012	--	--	-1.6	0.9	-0.4
	3-Yr-Avg	--	--	--	--	--
Joseph M. Juran Elementary School	2012	5.1	1.2	--	--	--
	3-Yr-Avg	--	--	--	--	--
Julio Ruiz de Alda Miqueleiz Elementary School	2012	1.5	-0.9	--	--	--
	3-Yr-Avg	--	--	--	--	--
Katrina Mumaw Elementary School	2012	0.1	1.2	--	--	--
	3-Yr-Avg	--	--	--	--	--
Koichi Wakata Middle School	2012	--	--	-3.3	0.1	1.8
	3-Yr-Avg	--	--	--	--	--
Margaret Ringenberg Middle School	2012	--	--	1.4	0.0	0.9
	3-Yr-Avg	--	--	--	--	--
Mariya Dolina Elementary School	2012	1.9	3.4	--	--	--
	3-Yr-Avg	--	--	--	--	--
Max Ward Middle School	2012	--	--	-0.4	-0.8	-0.7
	3-Yr-Avg	--	--	--	--	--
Moncrieff and Hood Middle School	2012	--	--	4.4	1.0	-1.7
	3-Yr-Avg	--	--	--	--	--
Morris Latham Elementary School	2012	1.3	2.2	--	--	--
	3-Yr-Avg	--	--	--	--	--

Exceeds Expected Growth: Estimated mean NCE gain is above the growth standard by at least 2 standard errors.

Meets Expected Growth: Estimated mean NCE gain is below the growth standard by at most 2 standard errors but less than 2 standard error above it.

Does Not Meet Expected Growth: Estimated mean NCE gain is below the growth standard by more than 2 standard errors.

-- The school does not have data for this test and subject in the most recent year.

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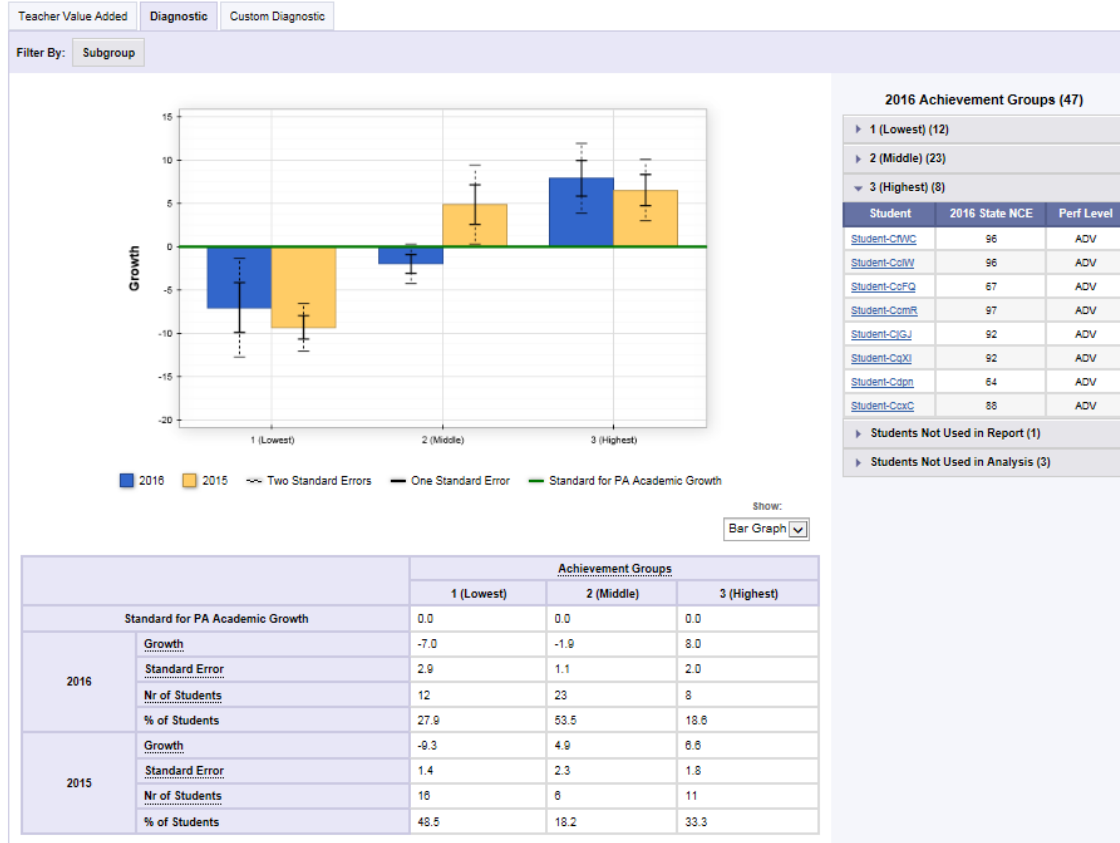
VALUE-ADDED REPORT SAMPLE

TEACHER #1 IMPACT ON STUDENT GROWTH



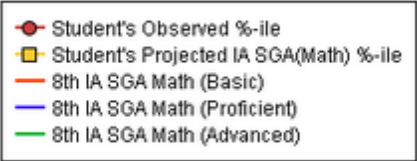
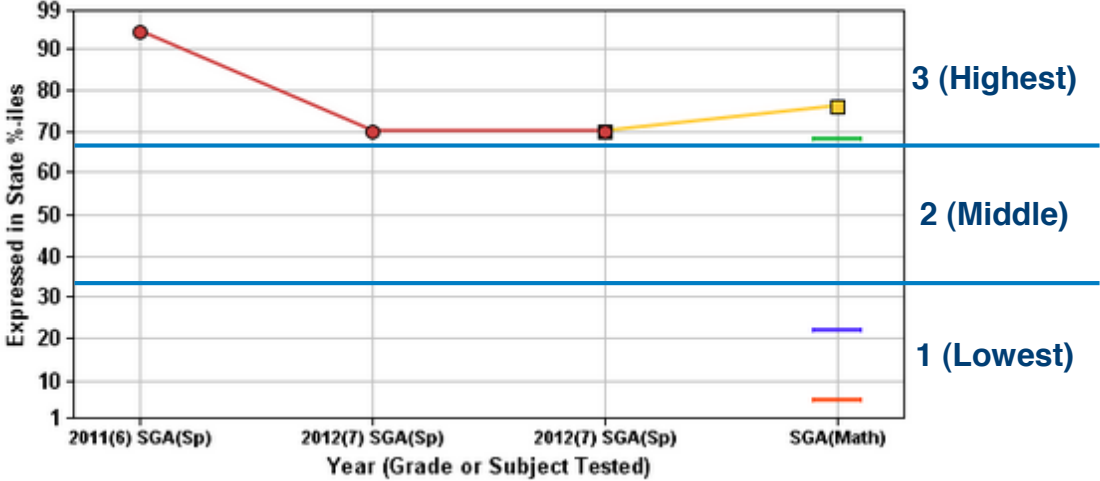
DIAGNOSTIC REPORT SAMPLE

TEACHER #1 IMPACT OF DIFFERENT TYPES OF STUDENTS



PROJECTION REPORT SAMPLE

INDIVIDUAL STUDENT PROJECTION TO 8TH GRADE MATH



VALUE-ADDED SAMPLE REPORT

TEACHER #2 IMPACT ON STUDENT GROWTH



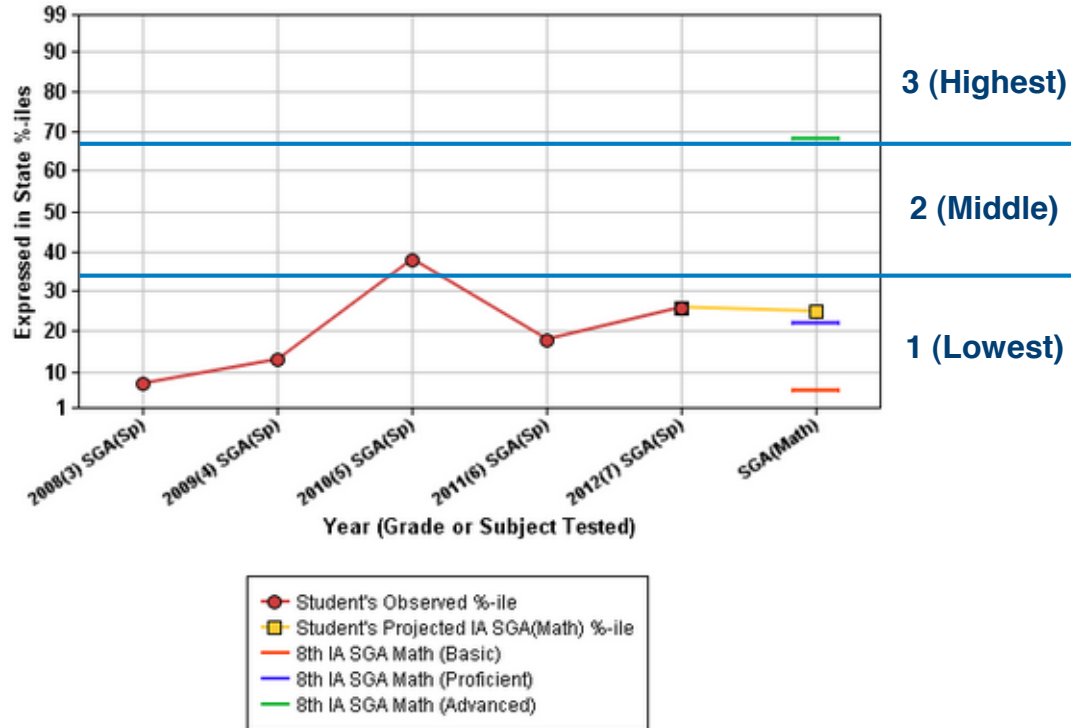
DIAGNOSTIC REPORT SAMPLE

TEACHER #2 IMPACT OF DIFFERENT TYPES OF STUDENTS



PROJECTION REPORT SAMPLE

INDIVIDUAL STUDENT PROJECTION TO 8TH GRADE MATH



CONSIDERATIONS DOES THE STATE'S GROWTH MODEL...

- Include:
 - Students with missing data?
 - All of a student's testing history, across grades and subjects?
 - Measures of standard error?
- Accommodate:
 - Different types of assessments?
 - Changing assessments?
 - Changing accountability systems?
 - Changing accreditation systems?
- Provide more than a single estimate of effectiveness?
 - Reporting to support educator use

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**THE
POWER
TO KNOW**