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Executive Summary:
State-Level Student Growth Strategies

Edmentum Research and Design
July 27, 2018

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After the Every Student Succeeds Act (2015)

A discussion of students' academic growth is closely tied to educational policies related to teacher effectiveness or school accountability. Under the Every Student Succeeds Act (ESSA), states are required to have long-term goals for improving student achievement as measured by the annual state assessments (U.S. Department of Education, 2015). Each state's education agency, consequently, has worked to develop and implement a new integrated local, state, and federal accountability system.

Longitudinal data systems including education outcomes shed light on developing approaches for measuring growth (Data Quality Campaign, 2013). ESSA granted more autonomy to states to develop new accountability systems that include growth models. Each state has its own approach to growth models: some states have adopted one or more of the currently available models, and some are considering developing new models. In this context, understanding various growth models across states is essential to develop a strategy for the growth model Edmentum uses for Exact Path.

State-Level Growth Strategies

Rather than reporting simple difference-scores calculated from two tests, state accountability systems tend to use more complex growth models to obtain greater reliability and validity. However, because different models in different situations provide different information depending on how each model defines academic growth, mandating a particular growth model should not be encouraged. Thus, states' growth models are a generic (collective) product which includes important considerations, such as underlying statistical properties, reporting the growth to various audiences, and functionality within the accountability system. In the context of proliferating academic growth models, many studies on model comparisons and classifications have been conducted in order to better understand these models (e.g., Auty et al., 2008; Castellano & Ho, 2013; Goldschmidt, Choi, & Beaudoin, 2012).

This study investigated documents (such as technical reports and presentation materials) and web-based resources (such as video and audio files) on state education agency websites across the following states: Arizona, California, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Michigan, Minnesota, Missouri, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, and Virginia. These resources are not limited to growth models but also include information about school accountability systems to examine how the growth models contribute to the system.

This report classifies growth models for these states into several categories:

- Gain Score Model
- Value Added Model (VAM)
- Student Growth Percentiles (SGPs)
- Categorical Model
- Student Learning Objectives (SLO)/Portfolios
- Residual Model

Figure 1 shows the number of states using each growth model.

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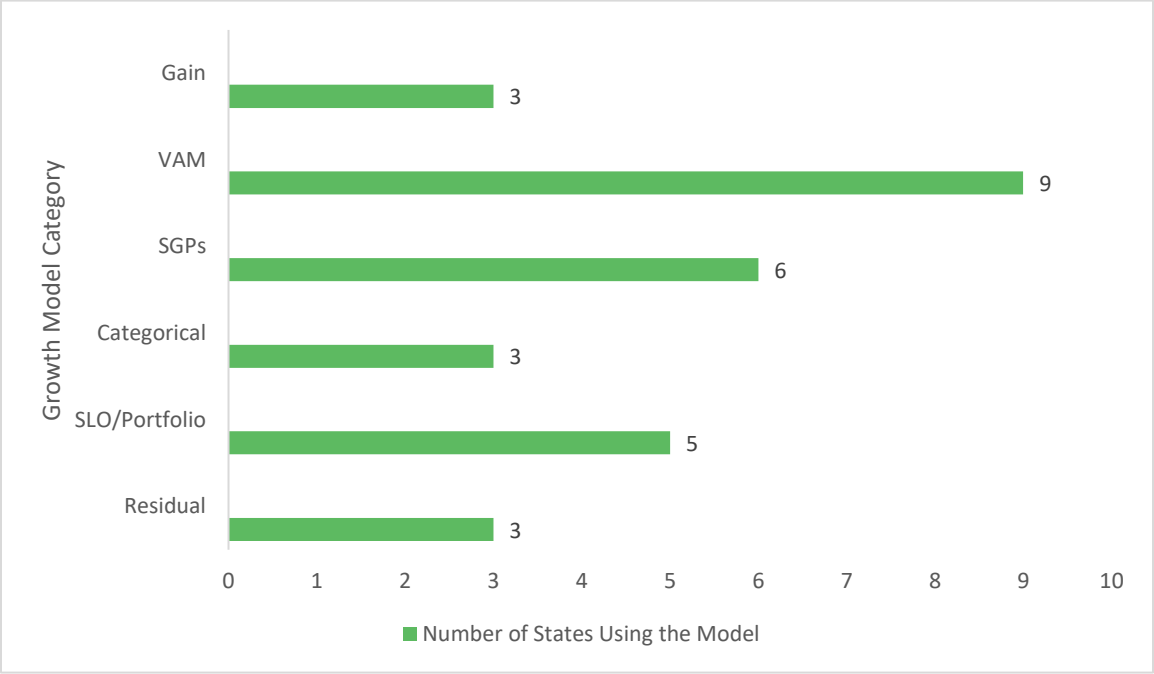
Figure 1. Number of States Using Each Growth Model



Each category is used in at least three states. The models are not mutually exclusive: they have some similarities in terms of assumptions for statistical models, data required to implement the model, or information obtained from the growth results.

Gain Score Model

In educational measurement, “true gain score” was defined as the difference between true scores on the initial and final tests, assuming the tests have parallel forms (Lord, 1956). From a perspective of absolute growth descriptions, because the gain score model supports the most intuitive interpretation of student growth, some states use this model with pre- and post-tests or vertically scaled tests. However, this model presents difficulties, such as unreliability of observed gain scores due to unreliability in each test and the need to use a vertical scale. Thus, it is not easy to accurately measure students’ academic growth using this approach.

Figure 2 depicts the Gain Score Model, along with its key features and research questions.

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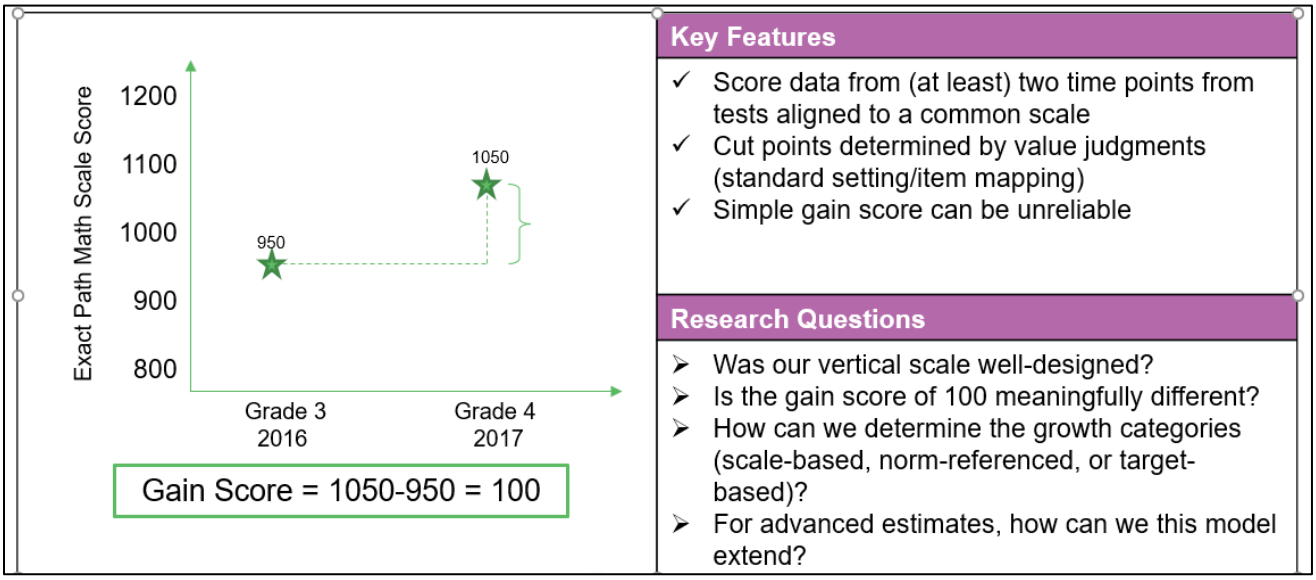
Figure 2. Gain Score Model



Value Added Model (VAM)

The VAM is a statistical model that uses student characteristics and test scores from prior years to determine expected student achievement in the current year. The difference between an observed achievement and an expected one at the student level (called value-added) is averaged by subject in a teacher's classroom to measure the teacher effect. Thus, the results from this model measure educators' contribution to their students' achievement on state assessments by comparing students' success with the success of similar peers who have similar prior test scores and demographics. In states analyzed for this study, this model is used the most. Most states using the VAM contract with SAS Institute for help developing models and analyzing data.

Student Growth Percentiles (SGP)

The SGP model is one of the most commonly used growth models in the states analyzed for this study. Conceptually, an SGP is the percentile of current test scores of students who have shown the same or similar results in academic achievement in prior test scores (the students are called an academic peer group). This model is appealing because it is easy to interpret, but its underlying statistical procedure is complicated. Unlike the gain score model, the SGP of a student tells us her/his relative standing given his/her achievement in previous years. In an educator accountability context, SGPs at the student level are aggregated into teacher or district levels using aggregation functions, such as mean or median.

Figure 3 depicts the SGP model, along with its key features and research questions.

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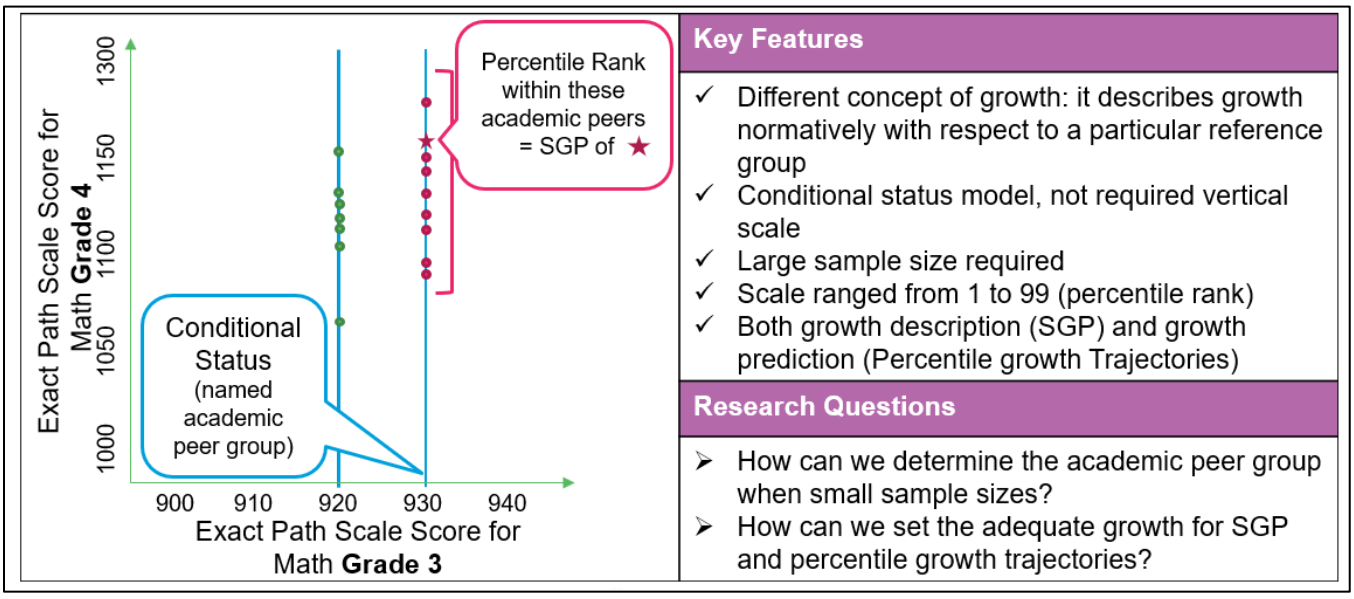
Figure 3. SGP Model

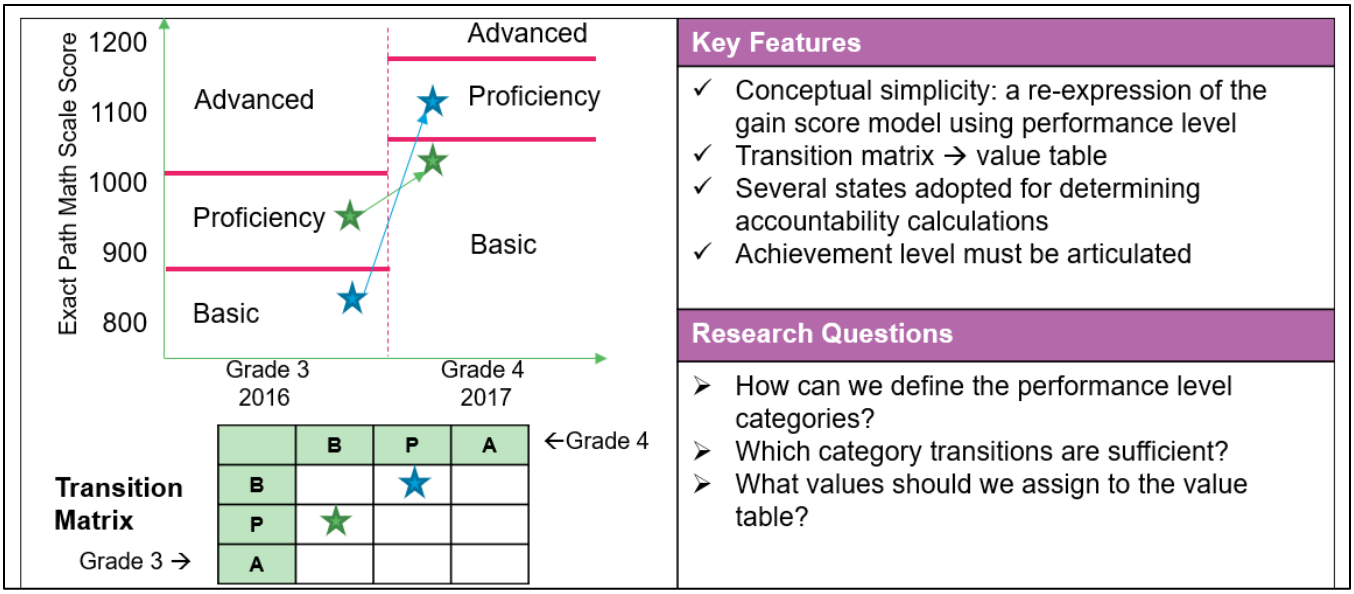


Categorical Model

The core of the categorical model is to construct a transition matrix. In this model, student academic growth is calculated based on students' changing performance levels on the state assessment from one year to the next. Each cell of the transition matrix provides a growth value based upon the number of students in a state who demonstrated a particular performance level in the previous year and a particular performance level in the current year. At teacher or other group levels, all students' growth values in a given group are averaged for each subject.

Figure 4 depicts the categorical model, along with its key features and research questions.

Figure 4. Categorical Model



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Student Learning Objectives (SLO)/Portfolios

The SLO/Portfolios model is intended to monitor a student's progress toward growth targets and demonstrate a teacher's impact on student learning. This approach places especial emphasis on the professional competence of teachers. The states that apply this approach for teacher evaluation require educators to gather information on their students' learning needs, strengths, weaknesses, and test scores. Although the SLO/Portfolios are not always included as a growth model, they are used in several states that have insufficient data to apply other statistically complicated growth models.

Residual Model

Finally, the Residual model category encompasses using any independent regression model. For predicting a regression line, a multivariate, multiple, or hierarchical regression model can be used. The Residual model may look similar to other regression-based growth models (e.g., VAM or SGPs) depending on the variables considered for constructing the model. However, the growth models in this category tend to be simpler and be developed in ways unique to each state.

Figure 5 depicts the residual model, along with its key features and research questions.

Figure 5. Residual Model

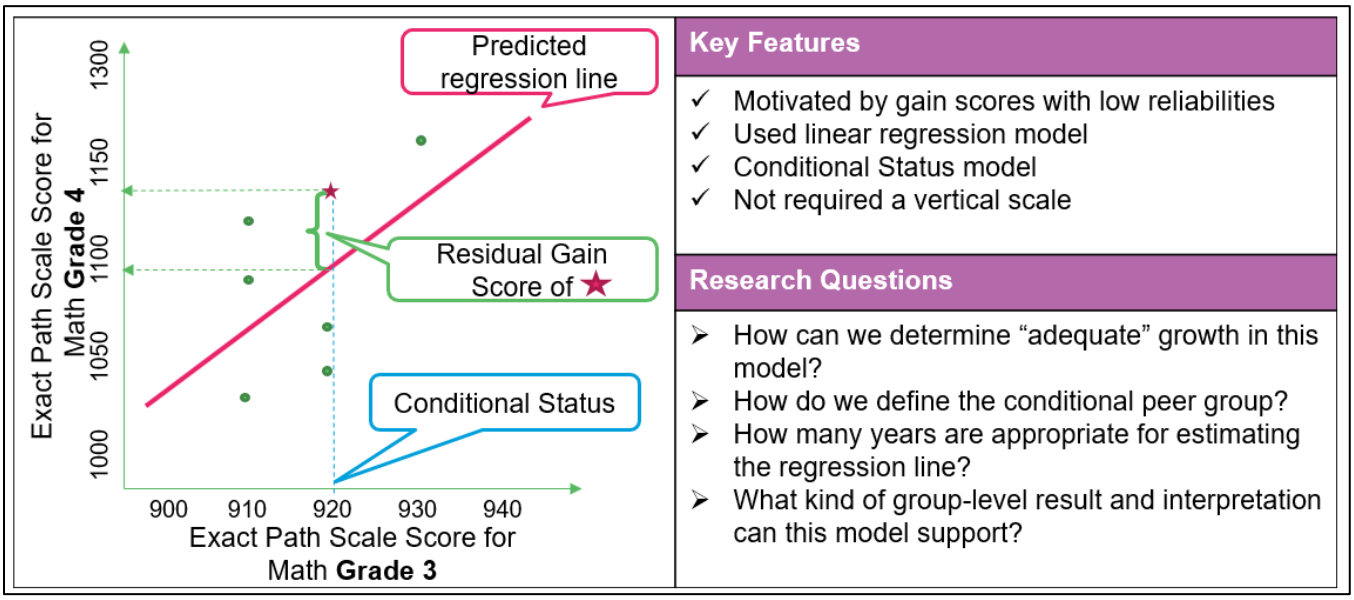

Table 1 shows the growth models used in the states analyzed for this study. Because different growth models support different growth interpretations and data requirements, states tend to apply more than one growth model to their system as a complementary relationship. Appendix 1 shows examples of some growth models used by states in practice.

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Table 1. Growth Models Used by States

States	Growth Model Category					
	Gain	VAM	SGPs	Categ.	SLO/Por.	Resi.
Arizona			✔			
California						✔
Florida		✔				
Georgia			✔			
Illinois			✔	✔		
Indiana			✔			
Kentucky				✔		
Louisiana		✔				
Michigan			✔		✔	
Minnesota				✔		
Missouri						✔
New Jersey			✔			
North Carolina	✔	✔			✔	
Ohio		✔				
Oklahoma		✔				✔
Pennsylvania		✔				
South Carolina		✔			✔	
Tennessee		✔			✔	
Texas	✔	✔			✔	
Virginia	✔			✔		

Most of the states analyzed for this study use one or two growth models. North Carolina and Texas both use a combination of three different models.

How Do Growth Models Contribute to Accountability Systems?

Accountability systems are planned and implemented by a state education agency to comply with legislative requirements based on the ESSA (2015). Since the main purpose of the law is to make sure public schools provide a quality education for all students, the state's education plan must include the following:

- academic standards
- annual testing
- school accountability
- goals for academic achievement
- plans for supporting and improving struggling schools
- state and local report cards

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The ESSA requires each state to choose at least five ways to measure school performance. The following indicators are required:

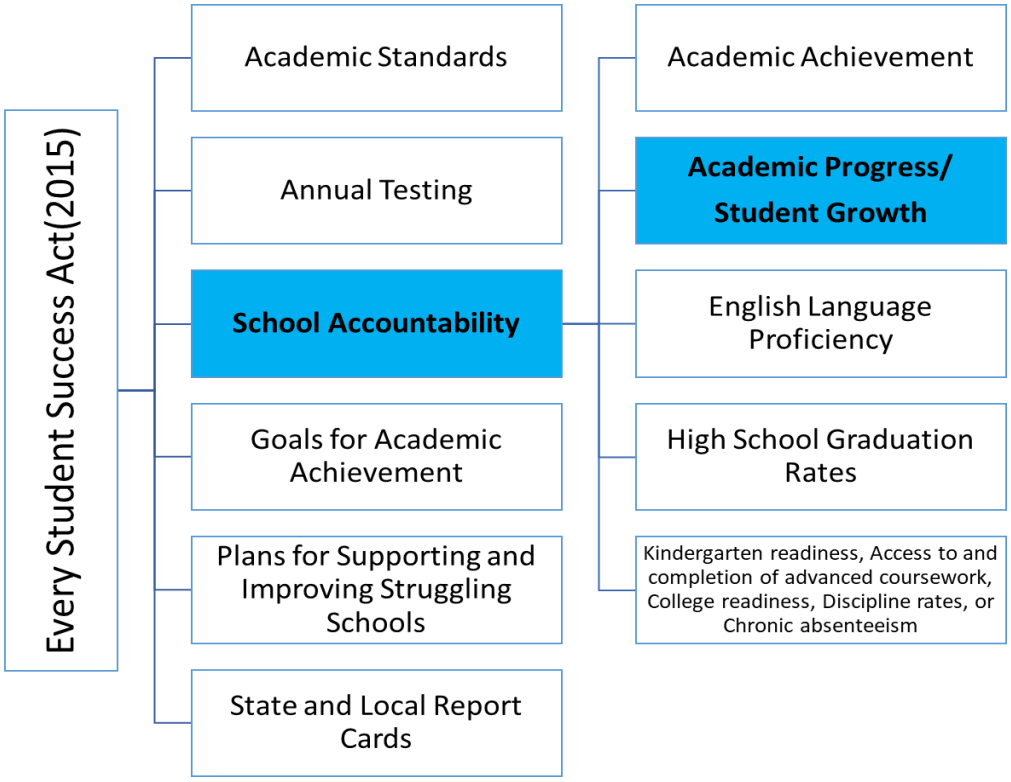
- academic achievement
- academic progress
- English language proficiency
- high school graduation rates

Other possible indicators states may use include the following:

- kindergarten readiness
- access to and completion of advanced coursework
- college readiness
- discipline rates
- chronic absenteeism

Figure 6 shows where the growth model for measuring academic progress fits into accountability systems under the ESSA. Each state's academic growth models serve as an indicator for measuring academic progress. Student growth results are aggregated at the teacher, school, or district level and reported as evidence of school accountability and educator evaluation. Appendix 2 shows how growth indicators are used to calculate overall school/educator performance in practice.

Figure 6. ESSA and Accountability System Organization Chart



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Conclusion and Discussion

This research tells us why the academic growth models are important for states, which models are used in practice, and how the growth models contribute to school accountability systems under the law. Key takeaways are as follows:

- A prerequisite of all growth models is great validity and reliability in assessment.
- State growth measures are more likely to be reported at an aggregated level rather than the student level.
- Growth measures are considered as one component among various performance measures in determining the success of schools, districts, and educators within any state accountability system.
- Different models in different situations provide different information. Many states have multiple rating categories for growth measures. In other words, several growth models are applied to complement each other.

The Edmentum Research and Design department is making plans to develop growth models for Exact Path that can provide a meaningful roadmap for effective learning paths. In individualized learning, modeling growth in academic achievement should include all information about student academic records and the developmental process. As our research develops, Exact Path's growth model may receive a new theoretical framework. However, at the same time, Exact Path's growth model will retain attributes of the commonly used growth models because they allow customers to interpret students' growth in familiar ways.

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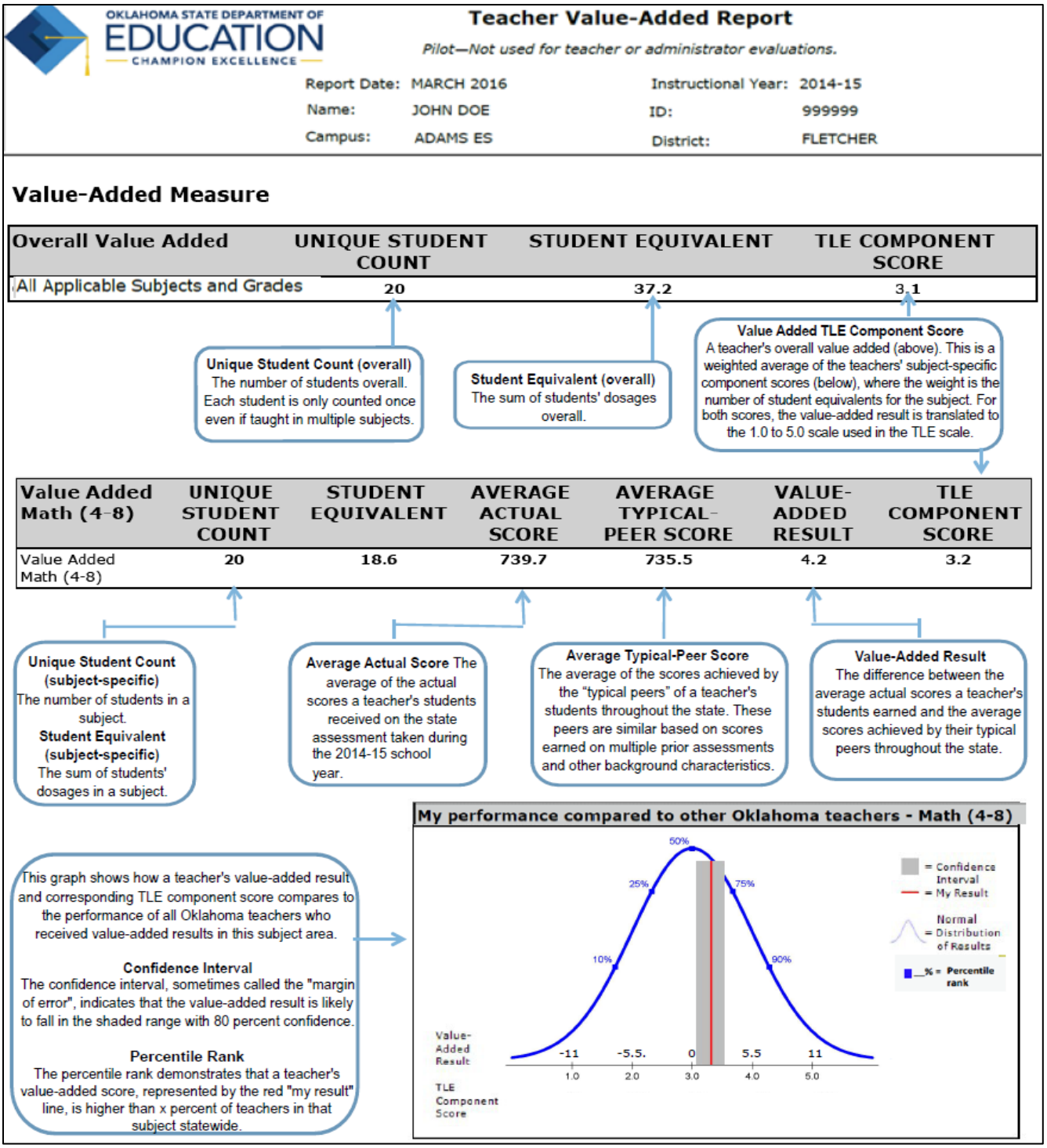
Appendix 1: Examples of Growth Models

Appendix 1 includes examples of some growth models used by states in practice.

Value Added Model

Oklahoma Sample Teacher Value-Added Result Reports (Spring 2016)



OKLAHOMA STATE DEPARTMENT OF EDUCATION
CHAMPION EXCELLENCE

Teacher Value-Added Report

Pilot—Not used for teacher or administrator evaluations.

Report Date: MARCH 2016 | Instructional Year: 2014-15
Name: JOHN DOE | ID: 999999
Campus: ADAMS ES | District: FLETCHER

Value-Added Measure

Overall Value Added	UNIQUE STUDENT COUNT	STUDENT EQUIVALENT	TLE COMPONENT SCORE
All Applicable Subjects and Grades	20	37.2	3.1

Unique Student Count (overall) The number of students overall. Each student is only counted once even if taught in multiple subjects.

Student Equivalent (overall) The sum of students' dosages overall.

Value Added TLE Component Score A teacher's overall value added (above). This is a weighted average of the teachers' subject-specific component scores (below), where the weight is the number of student equivalents for the subject. For both scores, the value-added result is translated to the 1.0 to 5.0 scale used in the TLE scale.

Value Added Math (4-8)	UNIQUE STUDENT COUNT	STUDENT EQUIVALENT	AVERAGE ACTUAL SCORE	AVERAGE TYPICAL-PEER SCORE	VALUE-ADDED RESULT	TLE COMPONENT SCORE
Value Added Math (4-8)	20	18.6	739.7	735.5	4.2	3.2

Unique Student Count (subject-specific) The number of students in a subject.
Student Equivalent (subject-specific) The sum of students' dosages in a subject.

Average Actual Score The average of the actual scores a teacher's students received on the state assessment taken during the 2014-15 school year.

Average Typical-Peer Score The average of the scores achieved by the "typical peers" of a teacher's students throughout the state. These peers are similar based on scores earned on multiple prior assessments and other background characteristics.

Value-Added Result The difference between the average actual scores a teacher's students earned and the average scores achieved by their typical peers throughout the state.

This graph shows how a teacher's value-added result and corresponding TLE component score compares to the performance of all Oklahoma teachers who received value-added results in this subject area.

Confidence Interval
The confidence interval, sometimes called the "margin of error", indicates that the value-added result is likely to fall in the shaded range with 80 percent confidence.

Percentile Rank
The percentile rank demonstrates that a teacher's value-added score, represented by the red "my result" line, is higher than x percent of teachers in that subject statewide.

My performance compared to other Oklahoma teachers - Math (4-8)

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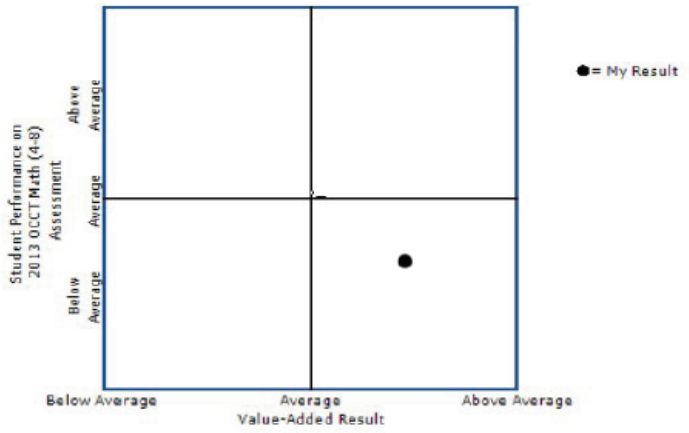
Oklahoma Sample Teacher Value-Added Result Reports (Spring 2016) – cont'd

Student Performance vs. Teacher Value- Added Result
This graph shows a teacher's value-added result and the performance of that teacher's students relative to the statewide average on the state assessment. With value-added measures, teachers can be identified as high performers regardless of their students' achievement levels.

SAMPLE Student Performance vs. Teacher Value-Added Result Comparison Graph - Math (4-8)



% of Year
The portion of the year the student was enrolled in the course a teacher taught in this subject from September through April.

% of Instruction
The percentage of responsibility for instruction a teacher was assigned for the student during the period he or she was enrolled in the course from September through April.

Dosage
Dosage is calculated based on roster verification data from spring 2015 or from information about students' enrollment in the school when roster verification data was not complete.

Student Roster
The roster includes students who contribute to a teacher's value-added result for the subject. Students who are not eligible to be included in the value-added model are excluded from this list. For example, students must have valid pre-test and post-test scores to be included.

Student Roster - Math (4-8)

This roster has been truncated to save space. A minimum of 10 students is required to yield a value-added result

STUDENT	% of Year	x	% of Instruction	=	Dosage
JOE BARKLEY	100%		100%		100%
SUSIE SMITH	50%		100%		50%
JIMMY JONES	100%		100%		100%

Note: The dosage of students contributing to your value-added results is calculated based on roster verification data from spring 2015, or from information about students' enrollment in the school when roster verification data was not complete

Prior Achievement Based on student test scores from the prior grade and year. For grades 4 through 8 math, algebra I, geometry, or algebra II, this is another mathematics assessment. For grades 4 through 8 reading, or English III, this is another reading/ English assessment.

Value Added By Sub-Groups - Math (4-8)

Prior Achievement	Unique Student Count	Student Equivalent	Value-Added Result
Advanced	5	***	***
Proficient	10	9.2	Average
Limited Knowledge	3	***	***
Unsatisfactory	2	***	***
Additional Groups	**Unique Student Count**	**Student Equivalent**	**Value-Added Result**
ELL	4	***	***
Not ELL	16	14.4	Average
IEP	4	***	***
Not IEP	16	14.4	Average

***
Indicates that there were too few students in this subgroup to report a result. Subgroup value-added results are only reported for groups of 7 or more students.

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Oklahoma Sample Teacher Value-Added Result Reports (Spring 2016) – cont'd

SAMPLE Value Added Reading(4-8)	UNIQUE STUDENT COUNT	STUDENT EQUIVALENT	AVERAGE ACTUAL SCORE	AVERAGE TYPICAL-PEER SCORE	VALUE-ADDED RESULT	TLE COMPONENT SCORE
Value Added Reading (4-8)	20	18.6	720.5	721.8	-1.3	2.9

Unique Student Count (subject-specific)
The number of students in a subject.
Student Equivalent (subject-specific)
The sum of students' dosages in a subject.

Average Actual Score The average of the actual scores a teacher's students received on the state assessment taken at the end of the course.

Average Typical-Peer Score
The average of the scores achieved by the "typical peers" of a teacher's students throughout the state. These peers are similar based on scores earned on multiple prior assessments and other background characteristics.

Value-Added Result
The difference between the average actual scores a teacher's students earned and the average scores achieved by their typical peers throughout the state.

This graph shows how a teacher's value-added result and corresponding TLE component score compares to the performance of all Oklahoma teachers who received value-added results in this subject area.

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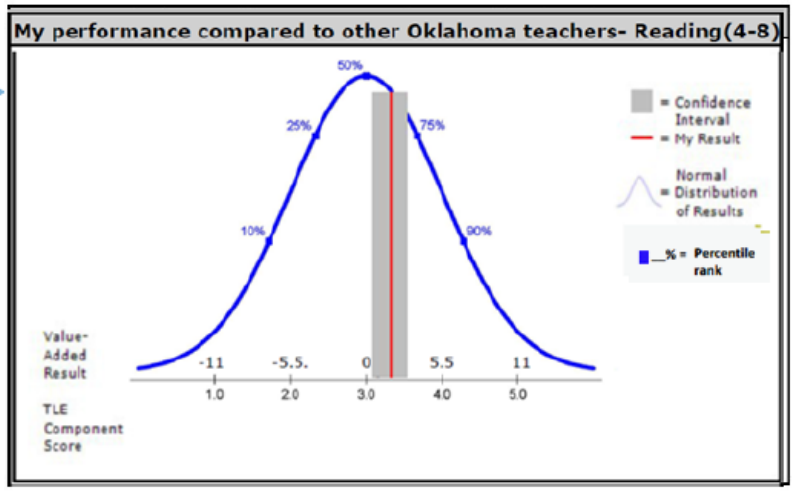
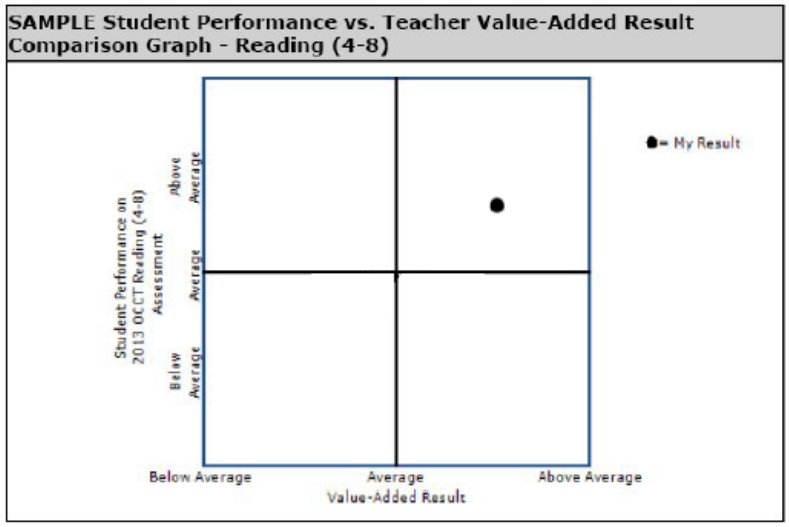


Student Performance vs. Teacher Value-Added Result
This graph shows a teacher's value-added result and the performance of that teacher's students relative to the statewide average on the state assessment. With value-added measures, teachers can be identified as high performers regardless of their students' achievement levels.



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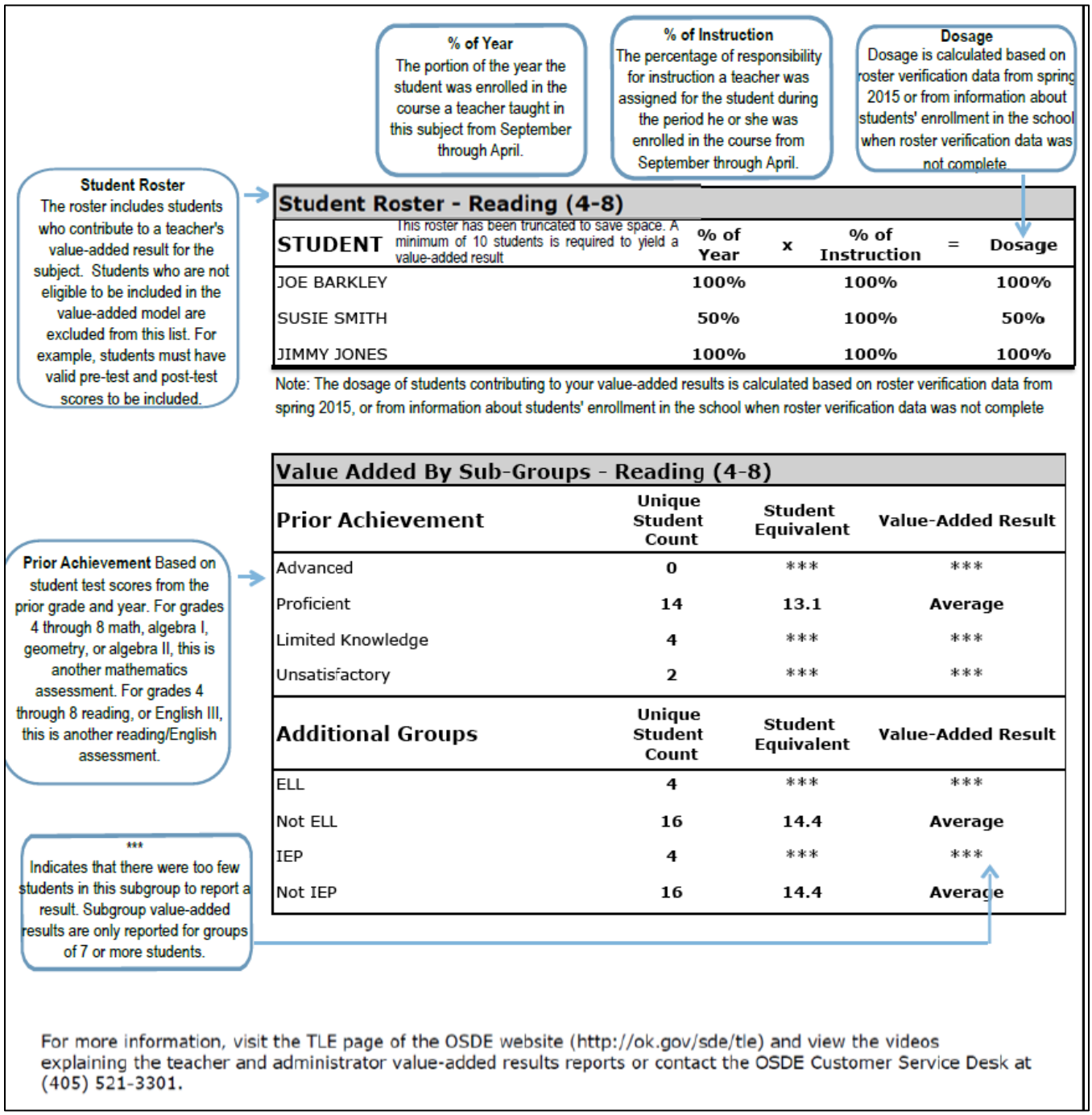
Oklahoma Sample Teacher Value-Added Result Reports (Spring 2016) – cont'd



% of Year
The portion of the year the student was enrolled in the course a teacher taught in this subject from September through April.

% of Instruction
The percentage of responsibility for instruction a teacher was assigned for the student during the period he or she was enrolled in the course from September through April.

Dosage
Dosage is calculated based on roster verification data from spring 2015 or from information about students' enrollment in the school when roster verification data was not complete.

Student Roster
The roster includes students who contribute to a teacher's value-added result for the subject. Students who are not eligible to be included in the value-added model are excluded from this list. For example, students must have valid pre-test and post-test scores to be included.

Student Roster - Reading (4-8)

STUDENT (This roster has been truncated to save space. A minimum of 10 students is required to yield a value-added result)	% of Year	x	% of Instruction	=	Dosage
JOE BARKLEY	100%		100%		100%
SUSIE SMITH	50%		100%		50%
JIMMY JONES	100%		100%		100%

Note: The dosage of students contributing to your value-added results is calculated based on roster verification data from spring 2015, or from information about students' enrollment in the school when roster verification data was not complete

Prior Achievement Based on student test scores from the prior grade and year. For grades 4 through 8 math, algebra I, geometry, or algebra II, this is another mathematics assessment. For grades 4 through 8 reading, or English III, this is another reading/English assessment.

Value Added By Sub-Groups - Reading (4-8)

Prior Achievement	Unique Student Count	Student Equivalent	Value-Added Result
Advanced	0	***	***
Proficient	14	13.1	Average
Limited Knowledge	4	***	***
Unsatisfactory	2	***	***
Additional Groups	**Unique Student Count**	**Student Equivalent**	**Value-Added Result**
ELL	4	***	***
Not ELL	16	14.4	Average
IEP	4	***	***
Not IEP	16	14.4	Average

***
Indicates that there were too few students in this subgroup to report a result. Subgroup value-added results are only reported for groups of 7 or more students.

For more information, visit the TLE page of the OSDE website (http://ok.gov/sde/tle) and view the videos explaining the teacher and administrator value-added results reports or contact the OSDE Customer Service Desk at (405) 521-3301.

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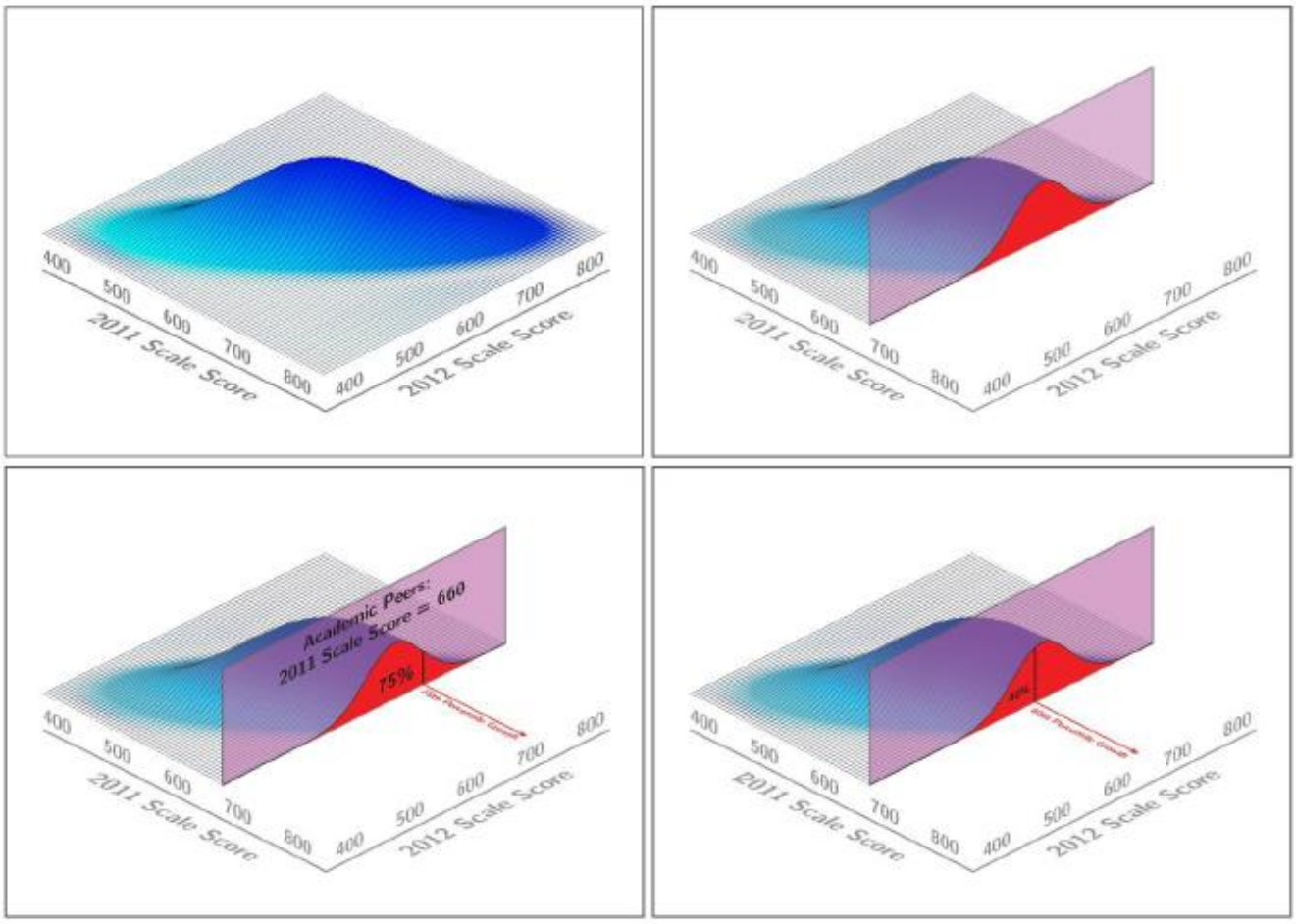
Student Growth Percentiles

Arizona Growth Model



Conceptual illustration of the current year growth percentile based on prior and current year test performance (Betebenner, 2011)

In 2017, the AZMERIT Grades 3-12 scale scores from 2016 and 2017 will be used to calculate growth for Grades 4-12. Grade 3 is the first grade Arizona students are given a statewide standardized assessment; therefore; Grade 4 is the first possible opportunity to assess growth for a student. Students must have scores for both 2016 and 2017 and for two consecutive grade levels in order to receive an SGP.

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Arizona SGP calculations

To receive an SGP in English Language Arts, a student has to take the test appropriate for the grade he is enrolled in. For example, a student in Grade 5 has to take the ELA Grade 5 test to receive an SGP. For Mathematics, a student in Grades 3-7 has to take the test appropriate for the grade he was enrolled in. A student in Grade 8 could take either the Mathematics Grade 8 test or any of the high school end-of-course tests or both; if the student has a grade-level assessment and a high school end-of-course test both tests are counted. A student in high school has to take any of the high school end-of-course tests in order to receive an SGP. Students who take the same test for two consecutive years are not assigned an SGP.

Only the SGPs of FAY students comprise the school's growth score. A categorical evaluation of school growth is used to obtain the growth score of all students in a school. In order to do this, the SGPs of FAY students are classified into three levels ranging from low to high:

L= Low (SGP 1-33)
A= Average (SGP 34-66)
H= High (SGP 67-99)

Then the percentage of students at the school level, using all grades, is calculated separately for each subject (English Language Arts and Mathematics) and for each of the categorical growth bands defined by the students' prior-year achievement level and current-year SGP growth level. The percentages are then weighted differently in the following ways:

Current-Year Student Growth Percentile			
Prior-Year Achievement Level	Weights		
Highly Proficient (HP)	0	0.50	1.00
Proficient (P)	0	0.70	1.20
Partially Proficient (PP)	0	0.90	1.80
Minimally Proficient (MP)	0	1.00	2.00
	1-33	34-66	67-99
	Low Growth	Average Growth	High Growth

The formula for the overall score of a school for each subject is:

The SGP points of a school for each subject = ((Percentage of prior year MP students who are current year FAY and made high growth x 2.00) + (Percentage of prior year PP students who are current year FAY and made high growth x 1.80) + (Percentage of prior year P students who are current year FAY and made high growth x 1.20) + (Percentage of prior year HP students who are current year FAY and made high growth x 1.00) + (Percentage of prior year MP students who are current year FAY and made average growth x 1.00) + (Percentage of prior year PP students who are current year FAY and made average growth x 0.90) + (Percentage of prior year P students who are current year FAY and made average growth x 0.70) + (Percentage of prior year HP students who are current year FAY and made average growth x 0.50))

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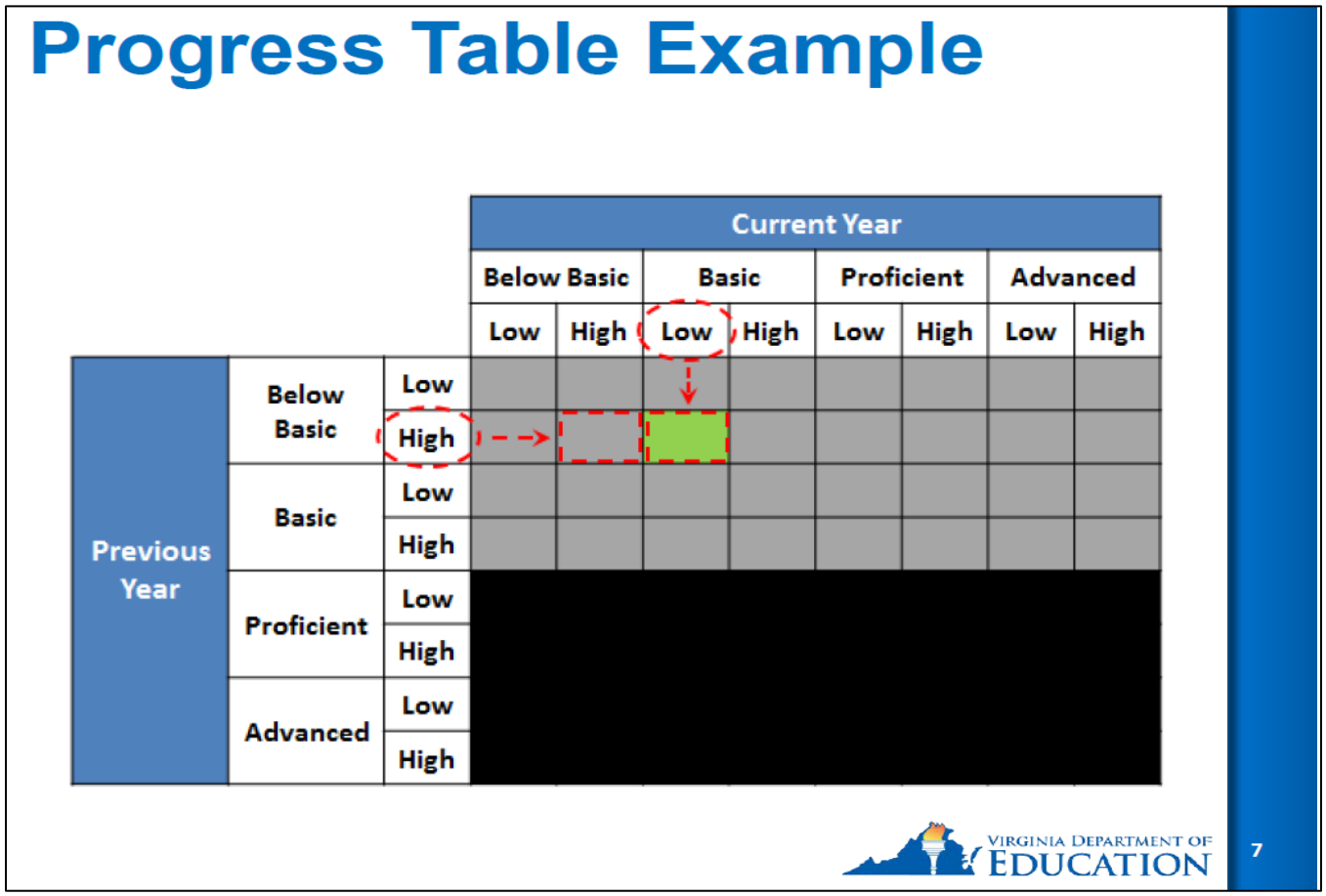
Categorical Model

Virginia Department of Education



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Student Learning Objectives/Portfolios

Ohio State SLO Template Checklist

Appendix B. Student Learning Objective (SLO) Template Checklist

This checklist should be used for both writing and approving SLOs. It should be made available to both teachers and evaluators for these purposes. For an SLO to be formally approved, ALL criteria must be met, and every box below will need a check mark completed by an SLO evaluator.

Baseline and Trend Data	Student Population	Interval of Instruction	Standards and Content	Assessment(s)	Growth Target(s)	Rationale for Growth Target(s)
What information is being used to inform the creation of the SLO and establish the amount of growth that should take place within the time period?	*Which students will be included in this SLO? Include course, grade level, and number of students.*	*What is the duration of the course that the SLO will cover? Include beginning and end dates.*	*To what related standards is the SLO aligned?*	*What assessment(s) will be used to measure student growth for this SLO?*	*Considering all available data and content requirements, what growth target(s) can students be expected to reach?*	*What is your rationale for setting the target(s) for student growth within the interval of instruction?*
☐ Identifies sources of information about students (e.g., test scores from prior years, results of preassessments) ☐ Draws upon trend data, if available ☐ Summarizes the teacher's analysis of the baseline data by identifying student strengths and weaknesses	☐ Includes all students in the class covered by the SLO ☐ Describes the student population and considers any contextual factors that may impact student growth ☐ Does not exclude subgroups of students that may have difficulty meeting growth targets	☐ Matches the length of the course (e.g., quarter, semester, year)	☐ Specifies how the SLO will address applicable standards from the highest ranking of the following: (1) Ohio's Learning Standards or (2) national standards put forth by education organizations ☐ Represents the big ideas or domains of the content taught during the interval of instruction ☐ Identifies core knowledge and skills students are expected to attain as required by the applicable standards (if the SLO is targeted)	☐ Identifies assessments that have been reviewed by grade-level and content-level district experts to effectively measure course content and reliably measure student learning as intended ☐ Selects measures with sufficient "stretch" so that all students may demonstrate learning, or identifies supplemental assessments to cover all ability levels in the course ☐ Provides a plan for combining assessments if multiple summative assessments are used ☐ Follows the guidelines for appropriate assessments	☐ Ensures all students in the course have a growth target ☐ Uses baseline or pretest data to determine appropriate growth ☐ Sets developmentally appropriate targets ☐ Creates tiered targets when appropriate so that all students may demonstrate growth ☐ Sets ambitious yet attainable targets	☐ Demonstrates teacher knowledge of students and content ☐ Explains why target is appropriate for the population ☐ Addresses observed student needs ☐ Uses data to identify student needs and determine appropriate growth targets ☐ Explains how targets align with broader school and district goals ☐ Sets rigorous expectations for students and teacher(s)

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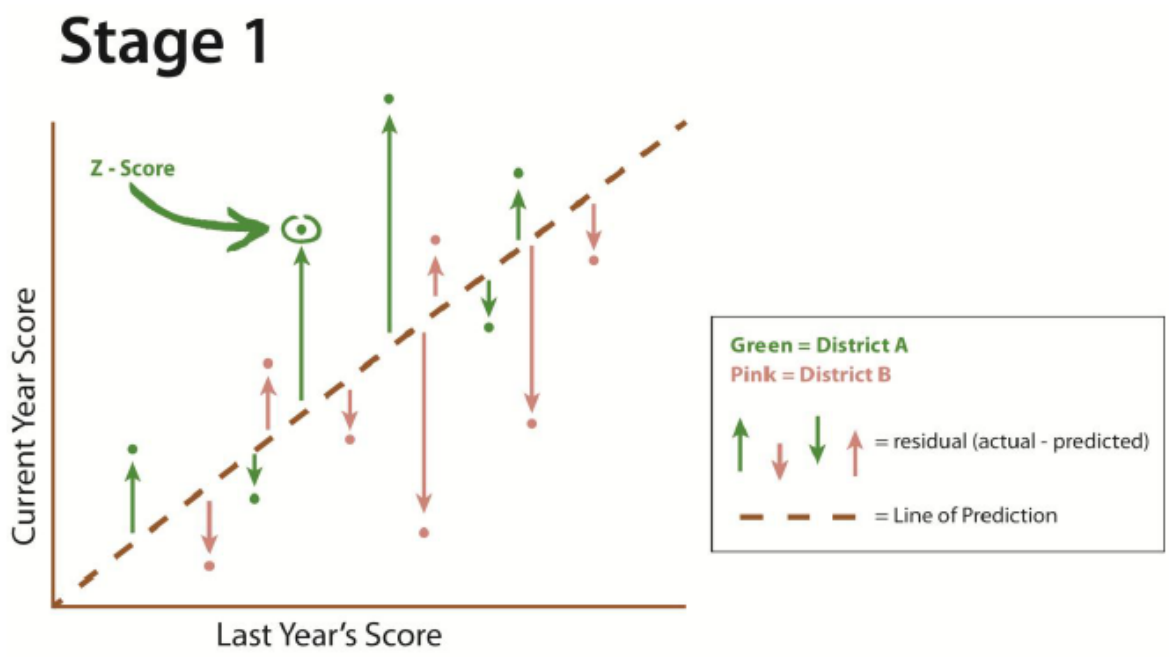
Residual Model

Missouri Growth Model Calculation

Figure 1



The "residual" is the difference between the actual score and the predicted score. Residuals can be greater than zero. When they are greater than zero, they are an indication that the model underestimated the student's score—in other words, the actual score was higher than predicted. The opposite is true for scores less than zero—they indicate the student scored lower than the model predicted.

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Appendix 2: Growth Model Contributions to School Accountability Systems

Appendix 2 shows some examples of how growth models contribute to school accountability systems or educator evaluation.

North Carolina Growth and School Performance Grade

Section VI. Growth and School Performance Grades (District Schools and Charter Schools)

Though only counted as 20% of the overall SPG, the amount of growth a school's students demonstrate for the year indicates the school's success in moving student achievement forward, a key criterion for sustained improvement. For 2016–17, 73.7% of all schools, district and charter, met or exceeded growth expectations. Table 12 and Figure 12 provide the percent of schools for each growth designation by school type.

Table 12. *Growth Status of Schools with School Performance Grades by School Type (District Schools and Charter Schools)*

Growth Status	Elementary School		Middle School		High School	
	Number	Percent	Number	Percent	Number	Percent
Exceeds Expected Growth	289	23.6	186	27.8	190	33.3
Meets Expected Growth	693	56.7	284	42.4	207	36.3
Does Not Meet Growth	241	19.7	200	29.9	174	30.5
Total	1,223		670		571	

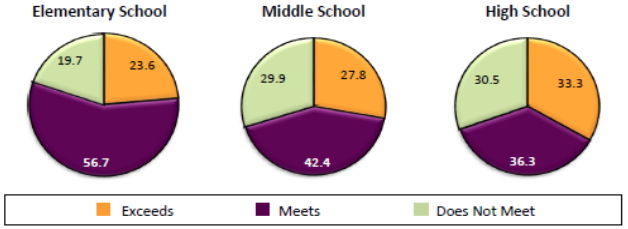

Figure 12. Growth status by school type

Data shows that of the 2,464 schools with both a SPG and a school accountability growth status, 1,849 (75.0%) met or exceeded growth, and of those schools: 171 (9.2%) earned an A/A^{+NG}, 632 (34.2%) earned a B, and 738 (39.9%) earned a C (see Table 13 and Figure 13).

Table 13. *Performance Grade by School Accountability Growth (District Schools and Charter Schools)*

Grade	Meets or Exceeds Expected Growth		Exceeds Expected Growth		Meets Expected Growth		Does Not Meet Expected Growth	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
A^{+NG}	86	4.7	45	6.8	41	3.5	1	0.2
A	85	4.6	52	7.8	33	2.8	1	0.2
B	632	34.2	288	43.3	344	29.1	73	11.9
C	738	39.9	227	34.1	511	43.2	290	47.2
D	270	14.6	52	7.8	218	18.4	193	31.4
F	38	2.1	1	0.2	37	3.1	57	9.3
Total	1,849		665		1,184		615	

*Due to rounding the percent of schools may not total 100%.

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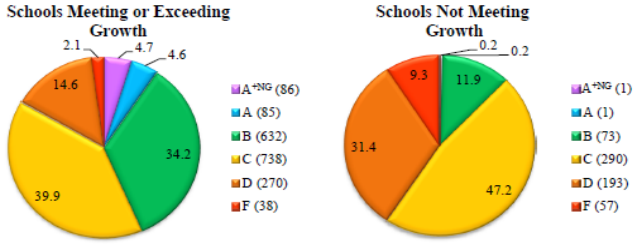

Figure 13. Performance grades of schools by growth designations

Section VII. Performance Grade by School Poverty Percentage (District Schools and Charter Schools)

Data for the poverty percentages were available for 2,473 schools. Table 14 and Figure 14 show for each letter grade the percent of all schools reporting poverty at 50% or more of their students or reporting poverty at 50% or less of their students. Schools with greater poverty earned fewer letter grades of A/A^{+NG} and B and earned more C's, D's, and F's than schools with less poverty.

Table 14. *Number and Percent of Schools by Letter Grade and School Poverty Percentage (District Schools and Charter Schools)* *

Grade	Total Number of Schools	Schools with 50% or More Poverty		Schools with Less than 50% Poverty	
		Number	Percent	Number	Percent
A^{+NG}	87	9	10.3	78	89.7
A	91	15	16.5	76	83.5
B	705	219	31.1	486	68.9
C	1,029	713	69.3	316	30.7
D	463	425	91.8	38	8.2
F	98	96	98.0	2	2.0
Total	2,473	1,477		996	

*Data Source: 2016–17 Eligible School Summary Report

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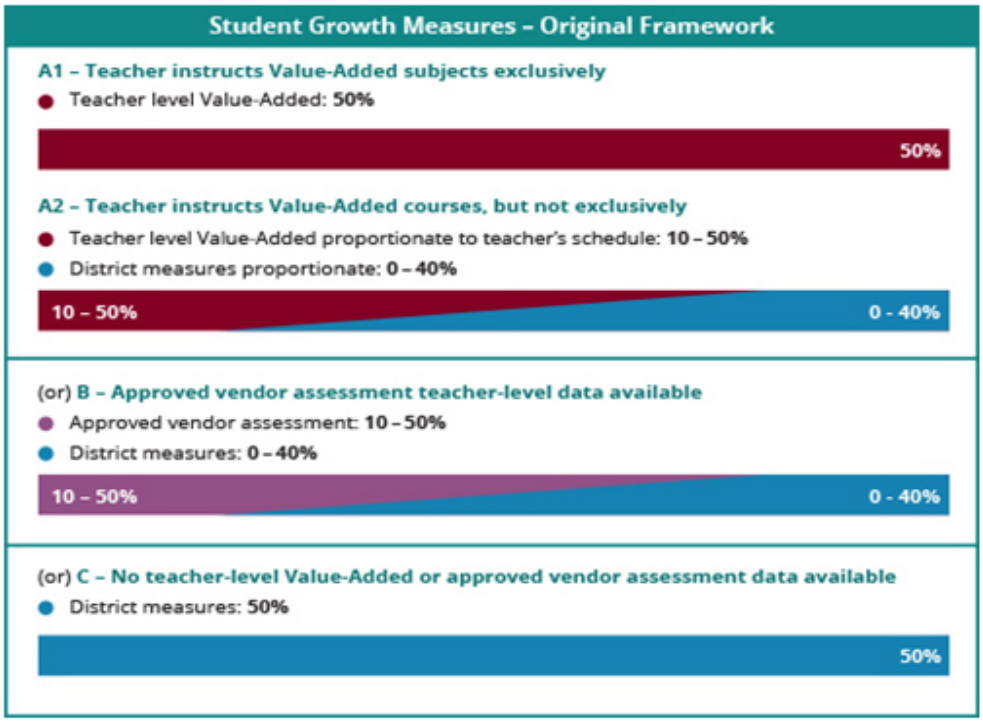
Ohio State Student Growth Measure Percentages

Student Growth Measure Percentages

State law, Ohio House Bill 64, made adjustments to the Ohio Teacher Evaluation System for the 2015-2016 school year and beyond. Districts will choose between the original teacher evaluation framework (based on teacher performance rating and student growth rating, each at 50 percent) – and the alternative teacher evaluation framework. The alternative framework includes teacher performance at 50 percent, student growth at 35 percent and an additional measure as 15 percent of the evaluation.

The percentages for student growth measure components in both the original and alternative framework are pictured below. These diagrams are from the large graphic charts for the complete original and alternative frameworks that are posted here.

ORIGINAL STRUCTURE - STUDENT GROWTH MEASURE PERCENTAGES



ALTERNATIVE STRUCTURE - STUDENT GROWTH MEASURE PERCENTAGES

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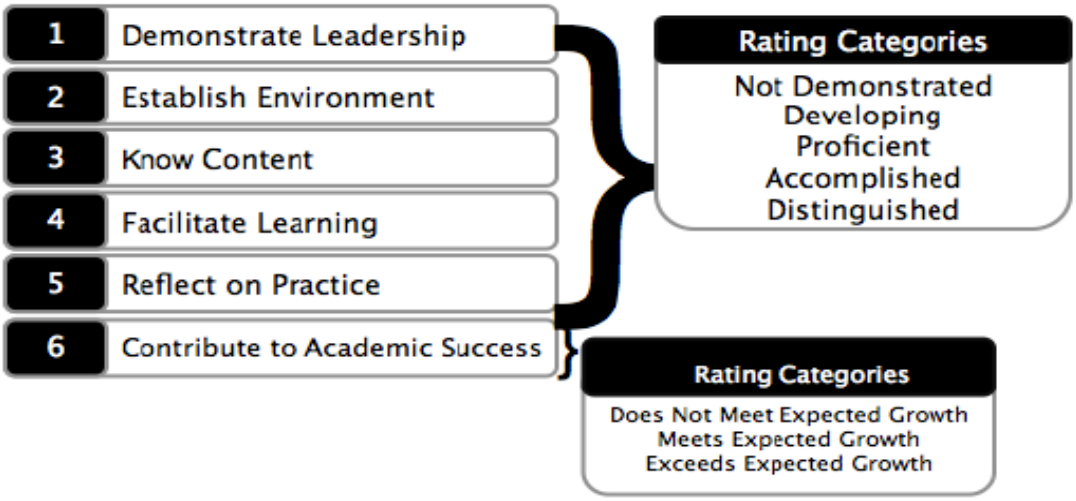
The North Carolina Educator Evaluation System for Teachers

The North Carolina Educator Evaluation System is a tool used for the evaluation of teachers in the state, as well as to target professional growth for educators. While the expectation is that all teachers will meet basic levels of proficiency, the System also identifies those teachers who excel in the classroom and school community.

The Educator Evaluation System is a multi-step process in which educators:

- Self-assess their own performance against the standards;
- Outline areas for professional growth and design plans for learning;
- Receive constructive feedback from administrators, peers, and mentors who complete observations; and
- Engage in critical conversations with evaluators throughout the process and when final ratings have been assigned.

The standards in the North Carolina Educator Evaluation System reflect the complexity of education in the 21st century by emphasizing the important roles of leadership, teamwork and collaboration, higher order thinking, authentic assessment, and technology-infused learning.



Using evidence from observations and other data, school administrators determine the ratings on the first five standards. The State Board of Education added the sixth standard to the North Carolina Educator Evaluation System in 2011. Student growth data, aggregated at the teacher-level, determine the rating on the sixth standard.

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