



Measures of Learning

State Approaches for Gauging Student Growth in New Evaluation Systems

October 2013

States increasingly understand that nothing in a school impacts student learning more than effective teaching. As a consequence, they are redesigning their educator effectiveness systems to provide more information and support to improve teaching. In doing so, they are looking beyond how many students “passed” the State test to embrace different methods for measuring growth in student achievement.

Through signature initiatives like Race to the Top and ESEA flexibility, 40 States and the District of Columbia are developing teacher and principal evaluation and support systems based on multiple measures, including student growth, that meaningfully differentiate performance. These systems will provide teachers and leaders with clear, timely and useful feedback, as well as targeted supports to improve instructional and leadership practices. Both Federal initiatives require including student growth as a significant factor and basing systems on statewide assessments in reading and math for teachers of tested grades and subjects.

Strategies for Measuring Student Growth

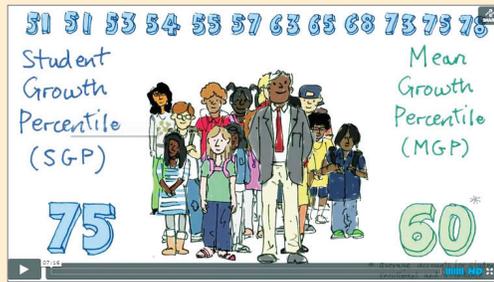
States have introduced student growth measures into educator evaluation and support in several ways:

Value-Added Models

One common way to measure student growth is using “value-added models” (VAMs). There are many ways to construct VAMs, but they typically rely on two or more years’ data from State assessments administered in consecutive grades. The Elementary and Secondary Education Act (ESEA) requires States to assess student achievement in reading and math in third through eighth grade and once in high school, and in science twice in grades four through eight, and once in high school. VAMs begin with the data from these statewide tests and, depending on the specific model, may include other factors. Using these data, VAMs predict what student growth can be expected from an average or typical teacher, and then compare actual student achievement with that prediction. A teacher’s value-added score is intended to convey how much an individual teacher contributes to student learning in a particular subject in a particular year. Student characteristics are factored into value-added scores, making it possible to compare teachers whose classes have students with different characteristics. Teachers who produce more growth than a typical teacher are thought to have added greater value.

The Reform Support Network, sponsored by the U.S. Department of Education, supports the Race to the Top grantees as they implement reforms in education policy and practice, learn from each other, and build their capacity to sustain these reforms, while sharing these promising practices and lessons learned with other States attempting to implement similarly bold education reform initiatives.

- **New York** is rolling out a VAM for use in 2014-2015. Value-added growth scores will count for 25 points of an educator's evaluation.
- **Colorado** uses a "growth model" as an alternative to VAMs, to calculate growth on State tests. While 50 percent of an educator's evaluation is based on student academic growth, school districts have significant latitude in determining how much to weight student growth scores on State tests, among multiple measures of student academic growth.



New York's engageNY website offers a collection of resources on growth measures including a short informative video.



Colorado's "Measures of Student Learning" webpage provides a host of information and resources on student growth.

Measuring Student Growth in Non-Tested Grades and Subjects

In subjects and grades without a State assessment (non-tested grades and subjects), States are working to create other options for measuring student growth, as in the following examples:



Delaware's work on assessing performance in non-tested grades and subjects is highlighted in a U.S. Department of Education brief.

- **Delaware** engaged 600 educators over the course of a year to develop local assessments for non-tested grades and subjects from the ground up. The State provided initial professional development, and then charged 43 working groups with creating complete assessment packages that included test items and growth goals specifying targets and evidence.

Tennessee has developed a Scoring Guide for evaluating non-tested subjects.

The Fine Arts Growth Measures System
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**APPENDIX:
Student Growth Scoring Guide**

EXEMPTIONS:
The Fine Arts Student Growth Measures has four state standards categories: Percussion, Chorus, Request, and Concert. These categories were designed to reflect the nature of the standards. The state does not collect data on these categories on individual students or on groups of students for the 2010-2011 school year. This does not affect the scoring guide for any other categories. The state does not collect data on these categories for the 2011-2012 school year.

	Dance	Music	Theater	Visual Arts
Standard 1	Standard 1.1	Standard 1.1	Standard 1.1	Standard 1.1
Standard 2	Standard 2.1	Standard 2.1	Standard 2.1	Standard 2.1
Standard 3	Standard 3.1	Standard 3.1	Standard 3.1	Standard 3.1
Standard 4	Standard 4.1	Standard 4.1	Standard 4.1	Standard 4.1

STANDARDS:

STANDARD	STANDARD
Standard 1: Elements and Skills	Standard 1: Drawing
Standard 2: Creative and Communicative	Standard 2: Printmaking
Standard 3: Cultural and Historical	Standard 3: Sculpture
Standard 4: Health, Safety, and Professionalism	Standard 4: Ceramics and Pottery
Standard 5: Artistic Process	Standard 5: Textiles, Textiles and Textiles
Standard 6: Artistic Process	Standard 6: Sculpture and Sculpture
Standard 7: Artistic Process	Standard 7: Sculpture and Sculpture
Standard 8: Artistic Process	Standard 8: Sculpture and Sculpture
Standard 9: Artistic Process	Standard 9: Sculpture and Sculpture
Standard 10: Artistic Process	Standard 10: Sculpture and Sculpture

- **Tennessee** enlisted a working group of fine arts educators to develop a portfolio system as an alternative assessment to satisfy the student growth component of its evaluations. The portfolios consist of student work demonstrating growth in the arts, with the requirement that they measure college- and career-ready standards and can be compared across classrooms. The portfolios undergo review by a student's teacher and another educator who does not know the student; substantial differences in those reviews trigger more "blind" reviews.

Student Learning Objectives

Many States also are employing “student learning objectives” (SLOs) as a means to measure student growth, especially in non-tested grades and subjects. An SLO refers to a process in which teachers and principals set a specific learning goal and a specific measure of student learning used to track progress toward that goal. Progress can be measured in different ways: an end-of-course exam given by teachers, a portfolio of student work or even a State test. Many States and districts are choosing SLOs to measure student growth because they let teachers participate in determining how best to measure the learning of their specific student population, while providing a consistent process for all teachers across a State. The U.S. Department of Education has created a **toolkit** to help States develop an SLO approach and an online library of annotated SLOs from 12 States to allow those who are creating or who already have created SLOs to learn from each other and fine-tune their work.

- **Ohio** uses SLOs as one of three options for measuring student growth among teachers of non-tested subjects. The assessments or underlying measures for SLOs may include district-approved, locally developed assessments; pre- and post-assessments; performance-based assessments; portfolios; and commercial assessments not on the Ohio Department of Education’s approved list.
- **Rhode Island** asks all teachers, not just teachers of non-tested grades and subjects, to create two to four SLOs. They recommend that teachers should, wherever possible, collaborate with grade, subject-area, or course colleagues to set SLOs. Teachers can choose the assessment(s) they use for SLOs as long as they meet the State’s criteria for high-quality assessments. The State also provides teachers and principals with an **approval checklist** (page 25) and a **“quality check tool”** to promote consistency and rigor of the process.



Targeting Growth
Using Student Learning Objectives
as a Measure of Educator Effectiveness

Although every state approaches SLOs differently, there is a common goal: to measure student growth in a way that is meaningful to teachers and principals. This toolkit provides a framework for developing SLOs that are aligned with state standards and assessment systems. It also provides a variety of examples and resources to help educators create high-quality SLOs for their students.

What Are SLOs?
An SLO is a specific learning goal and a specific measure of student learning used to track progress toward that goal. Progress can be measured in different ways: an end-of-course exam given by teachers, a portfolio of student work or even a State test. Many States and districts are choosing SLOs to measure student growth because they let teachers participate in determining how best to measure the learning of their specific student population, while providing a consistent process for all teachers across a State.

Why Properly Implemented, Student Learning Objectives Help Teachers Bring More Science to Their Art, Strengthen Instructional Support to the Classroom, and Improve the Quality of the Outcome?
When properly implemented, student learning objectives help teachers bring more science to their art, strengthen instructional support to the classroom, and improve the quality of the outcome.

Targeting Growth describes the key elements of Student Learning Objectives (SLOs) and some challenges in using them to measure student growth.

The Reform Support Network created this **toolkit**, which includes templates, samples and other resources, to help States and school districts create high-quality Student Learning Objectives.



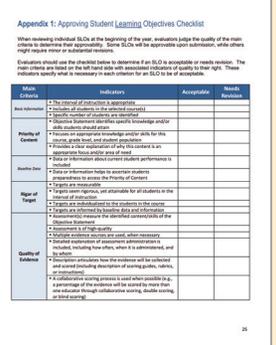
Reform Support Network
A Quality Control Toolkit for Student Learning Objectives

Objective: Improve High Quality SLOs

- Provide Tools for Developing, Approving, and Using SLOs
- Promote or Create Assessments
- Train Staff
- Evaluate Continuous Improvement

December 2012

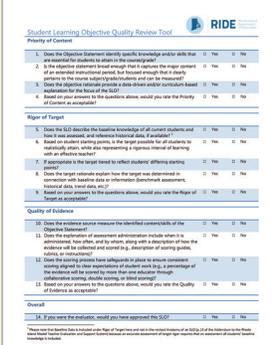
Rhode Island has created resources such as an approval checklist (left) and a “quality check tool” (right) for teachers and principals.



Appendix 1: Approving Student Learning Objectives Checklist

When reviewing individual SLOs at the beginning of the year, evaluate the quality of the goal, criteria to determine their appropriateness. Some SLOs will be appropriate upon submission, while others might require minor or substantial revisions.

Criteria	Indicators	Acceptable	Meets
Goal	<ul style="list-style-type: none"> The goal is clear and measurable. Includes all students in an approved subject. Includes a specific, measurable, and time-bound goal. 		
Measurable	<ul style="list-style-type: none"> Includes a specific, measurable, and time-bound goal. Includes a specific, measurable, and time-bound goal. Includes a specific, measurable, and time-bound goal. 		
Appropriate	<ul style="list-style-type: none"> Aligns with state standards and assessment systems. Aligns with state standards and assessment systems. Aligns with state standards and assessment systems. 		
Quality of Evidence	<ul style="list-style-type: none"> Includes a specific, measurable, and time-bound goal. Includes a specific, measurable, and time-bound goal. Includes a specific, measurable, and time-bound goal. 		



Student Learning Objective Quality Review Tool

Priority of Content

Priority of Content	Yes	No	Not Applicable
1. Does the SLO describe the baseline knowledge of all current students and the intended knowledge of all students?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the evidence of student learning align with the target outcome for all students in the approved subject area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Does the SLO include a specific, measurable, and time-bound goal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Communicating Student Growth Measures

Using Data to Improve Teacher Practice

States are collecting new, important data about student growth measures at the educator, school and district levels, as well as data about the new evaluation systems as a whole. The U.S. Department of Education is supporting States in these efforts. In the 2012-2013 school year, the Department brought together State education leaders and experts to analyze teacher evaluation ratings — including growth scores, ratings from two State educator evaluation and support systems — and craft a **set of strategic options** States can employ to boost the accuracy of their evaluations and better align their student growth data with other key measures of teacher effectiveness. These strategies include establishing a process for monitoring the correlation between student outcomes and evaluations ratings, training and retraining evaluators, and using a data dashboard to track and share evaluation data. In this vein, the Department is also working with States on a model data dashboard to increase access to the most important evaluation information — the first step in promoting its greater use.

Communicating Change

Public education systems are changing rapidly, and one place where the change is most rapid is in the way evaluation systems for teachers and principals incorporate student growth data. States can use communications and engagement strategies to create clear expectations among practitioners so that the new systems are implemented with care. To help States explain VAMs and other models of student growth, the U.S. Department of Education has created a **primer** that explains the basics in terms of the questions about student achievement that each model can help answer.

Measuring Teaching Matters
What Different Ways of Looking at Student Results Tell Us About Teacher Effectiveness
July 2013

States are redesigning their educator effectiveness systems to provide more information and more support to improve teaching. In the process, they increasingly look beyond the most basic and historically most common ways of measuring student performance — their many students' "score" of the State test in a given year. A number of States now require an objective measure of student growth as part of teacher evaluations.

States are using student growth measures to understand teacher effectiveness for good reasons. First, student learning is the most important expectation set for schools, and nothing in a school impacts student learning more than effective teaching.

Second, new data systems opened for better links between student outcomes, tests, graduation, professional development and specific schools and teachers. This facilitates development of and systems learning about changes to policy and practice that might lead to improvements in the quality of teaching and public schools.

Finally, traditional methods of evaluating teachers that typically do not include objective measures of teacher performance have in most state education agencies (SEAs) and local educational agencies (LEAs) provided misleading information about teacher effectiveness. In particular, these methods tend to yield high ratings for almost all teachers, and, consequently, these ratings have less value in identifying either future teacher effectiveness or student achievement. As a result, they have provided little information that can help teachers become more effective practitioners.

This brief describes various approaches to measuring student growth and what research says about the extent to which student growth can be used as a measure of teacher performance.

Approaches to Measuring Teacher Performance

Between the traditional methods described here and the new methods, SEAs and LEAs have considerable flexibility in choosing an approach. One of the most promising ideas is to use an objective measure of student growth as a measure of teacher performance. Other promising ideas include using a combination of these methods and other data sources, such as student achievement, to better understand teacher effectiveness and to inform decisions about teacher performance.

The Reform Support Network, sponsored by the U.S. Department of Education, supports the State to the top priority and the most important data about the new systems. More information about the network and the network's activities is available at www.reform-support.org.

Measuring Teaching Matters describes the most prevalent kinds of value-added models (VAMs) being used in teacher evaluation systems and summarizes research on what VAMs offer in understanding teacher performance.

Promoting Evaluation Rating Accuracy
Strategic Options for States
June 2013

With the advent of college- and career-ready standards, students must know and be able to do practically more than ever before to be prepared for these more demanding goals. With a growing recognition of the importance of teachers in driving student outcomes, policymakers and parents are increasingly looking for ways to ensure that teachers are the best qualified to meet these goals. States have created the new generation of teacher evaluation systems with high aspirations. The new systems incorporate multiple measures of teacher performance, including observations and student growth, and aim to improve teacher outcomes, help teachers improve their practice and inform career milestone decisions, such as the granting of tenure or compensation increases.

Formers of these new evaluation systems were reacting to the fact that the typical American school district rated 80 percent of its teachers as effective or better, a condition that DOD labeled the "widespread effect" in its 2009 report of the same name. DOD's teacher evaluation systems have been used by more than 30 states and are being used by more than 100 school districts. The new generation of evaluation systems, however, are designed to reflect the reality of performance in schools, and to ensure that teachers receive a performance continuum and therefore give school districts the means to identify teachers in need of support and those who are performing well, reward or display in more ways to acknowledge their advanced effectiveness.

Early in the implementation of the new generation of evaluation systems, these evaluations have not yet been used. Preliminary data show persistence of the widespread effect despite substantial changes to the design and implementation of evaluation. Evaluation reports have been used to help States, school districts, school leaders and teachers better understand the accomplishment needs of individual teachers. In a range of State and district efforts, teachers and principals, and external experts in educator evaluations and strategic communication gathered in the District of Columbia in February 2013 to explore ways to improve evaluation systems to State and local levels. This report summarizes the findings of these efforts, and offers a range of strategic options to address the challenge. The report summarizes the actions of the network.

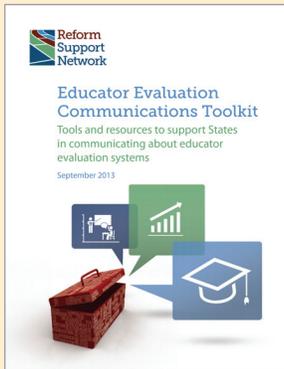
Analysis of State Evaluation Rating Data

States have used evaluation data in a variety of ways. In 2011-2012, 10 states used evaluation data to inform decisions about teacher performance. In 2011-2012, 10 states used evaluation data to inform decisions about teacher performance. In 2011-2012, 10 states used evaluation data to inform decisions about teacher performance.

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This brief developed by the Reform Support Network describes seven strategic options for States and school districts implementing new teacher evaluation systems to ensure the quality of classroom observations.

The Department also has convened State leaders and worked with States to organize a **toolkit** of resources that help engage educators around new evaluation systems. The tools inform teachers and create feedback loops **engaging educators** to share their experiences in ways that can drive improvements to new systems.



Developed by Reform Support Network experts and leaders from Race to the Top States, this **toolkit** offers resources to communicate about teacher evaluation systems with a range of audiences, paying special attention to teachers.



Based on a meeting of leaders from five Race to the Top States and communications experts, this **brief** describes content teachers need most and the ways to distribute it that they have used in pursuit of meaningful engagement.

Key Considerations in Measuring Student Growth

Measuring student growth represents an important new lens on teaching and learning, one that allows for more substantial fine-tuning of instruction than simple calculation of passing rates on State tests permits. The trend also is prompting States to develop and adopt new ways to measure student growth that go beyond large-scale assessments.

The Department has worked with States as they connect student growth and educator effectiveness. In that work, State leaders have found these key considerations helpful to explore as they refine measures and their use:

- How will student growth as a significant factor be determined for teachers of tested and non-tested grades and subjects?
- How will these measures fit within the current portfolio of assessments? Will the State create additional assessments, or aim to use measures of student growth without adding additional tests for students?
- Who will develop the new measures — individual teachers, schools, districts or States?

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