Reform Support Network

Targeting Growth

Using Student Learning Objectives as a Measure of Educator Effectiveness

As States and districts implement educator evaluation systems that include measures of student growth, one of the challenges they face is identifying measures for non-tested grades and subjects.

Using student learning objectives (SLOs) is one promising approach to addressing this challenge.

SLOs have their origins in the experience of Denver Public Schools, which in 1999 began using them to link teacher pay to student outcomes. Districts like Austin Independent School District and Charlotte-Mecklenburg Schools, as well as States that won Race to the Top grants—including Rhode Island, Georgia, New York and several others—are building on the experience of Denver Public Schools and developing methods for using SLOs as a tool to incorporate measures of student growth for non-tested grades and subjects (NTGS) in their evaluation systems.

What Are SLOs?

At the heart of an SLO is a specific learning goal and a specific measure of student learning used to track progress toward that goal. There are many options for student growth measures. It is possible to use large scale standardized tests, even State standards tests for SLOs. However, it is also possible to use other methods for assessing learning, such as end of course exams in secondary courses, student performance demonstrations in electives like art or music, and diagnostic pre- and post-tests in primary grades or other relevant settings.

Teachers, principals and other administrators and their supervisors can set SLOs for any subject, grade or group of students. Groups of teachers in the same subject or grade or in the same school or district can set them as well. With their supervisors, principals can set objectives focused on school-wide learning goals, and district-level administrators can develop SLOs with district goals in mind.

Although many early adopters of SLOs expect them to be set collaboratively by teachers and their evaluators, there is no hard and fast rule for their development. Georgia, for instance, is piloting a process through which SLOs are developed at the district level and then approved by the State.

SLOs show potential as an evaluation method to incorporate student growth measures in the evaluation process, but they are also an important method for improving instructional practice. Research on Denver's use of SLOs found that rigorous and high-quality growth objectives were associated with higher student achievement.[1] Like well-constructed SLOs, good instruction includes gathering data, setting goals based on that data, and then assessing whether the goals have been met.

> **"If properly implemented, student learning objectives help teachers bring more science to their art, strengthen instructional support to the classrooms, and improve the quality of the outcome."**
>
> William J. Slotnik
> Founder and Executive Director
> Community Training and Assistance Center

[1] Community Training and Assistance Center. *Catalyst for Change: Pay for Performance in Denver Final Report* (2004). See http://www.ctacusa.com/PDFs/Rpt-CatalystChangeFull-2004.pdf.

SLO: All the Basic Elements				
Population	Spanish II Class; all 30 students.			
Learning Content	New York State Learning Standards for Language Other Than English (LOTE).			
Interval	SY 2012–13 (1 year).			
Evidence	1. Spanish I summative assessment results from students in 2011–12. 2. District-wide pre-assessment administered at the beginning of the school year. 3. District-wide summative assessment administered at the end of the school year.			
Baseline	1. All students had 2011–12 Spanish I results that demonstrated scores of proficient or higher in all basic vocabulary and grammar. 2. Scores ranged from 6%–43% on the Spanish II District-wide diagnostic assessment.			
Target(s) and Scoring	1.80% of students will demonstrate mastery of at least 75% of the Spanish II performance indicators, as measured by the district's summative assessment in May 2012.			
	Highly Effective (18–20 points)	Effective (9–17 points)	Developing (3–8 points)	Ineffective (0–2 points)
	86–100% of students demonstrate mastery of 75% of the Spanish II performance indicators.	78–85% of students demonstrate mastery of 75% of the Spanish II performance indicators.	66–77% of students demonstrate mastery of 75% of the Spanish II performance indicators.	65% or less of students demonstrate mastery of 75% of the Spanish II performance indicators.
Rationale	Previous work in Spanish I focused on working with basic vocabulary and grammar, and building preliminary oral skills. The diagnostic assessment is heavily focused on more advanced writing and reading skills, which are essential components of the Spanish curriculum. Spanish II requires students to build on their learning from Spanish I in order to acquire mastery in these areas and to be prepared for Spanish III. Since all students completed Spanish I having achieved basic proficiency levels, I am confident they will achieve 80% mastery or above on at least 75% of the Spanish II materials.			

Source: New York State Education Department, *Guidance on the New York State District-Wide Growth Goal-Setting Process: Student Learning Objectives*, Revised March 2012 (with changes from enactment of Chapter 21 of the Laws of 2012), http://engageny.org/wp-content/uploads/2012/03/slo-guidance.pdf.

A rigorous and high-quality SLO has a number of key elements:[2]

1. **Clear identification of the student population.** SLO examples featured in this publication clearly identify specific populations: "all 30 students," "84 seventh grade students" and "32 third grade students." These examples also have an important indicator of high-quality SLOs—the extent to which they apply to all of a teacher's students. At least one SLO developed by a teacher ought to include every student in that teacher's class. This helps ensure that teachers are accountable for the academic progress of all of their students. There may be instances, however, when additional SLOs may be written for subgroups of students, such as those performing at particularly high or low levels.

2. **Specific time period.** A high-quality SLO identifies a clear timeline within which students will reach an academic goal. Typically, SLOs are goals set for what a teacher can accomplish with his/her students during the one full school year that the students are within the teacher's charge. However, SLOs are flexible. Teachers who have a class of students for only one semester can write an SLO for that unit of time. SLOs can also take into consideration students who might not have attended a school or been exposed to a teacher for the full time period identified by an SLO. To reflect this consideration, some SLOs include language that only those students who attend a specific period of time (often 80-85 percent) will be expected to reach the goal.

[2] See Slotnik, William J. and Maribeth D. Smith. *Tying Earning to Learning: The Link Between Teacher Compensation and Student Learning Objectives.* Community Training and Assistance Center (April 2008). See also the Charlotte-Mecklenburg Schools *SLO Guide* retrieved at http://www.ctacusa.com/PDFs/CMSSLOGuide-2008.pdf.

SLO Example: Social Studies

SLO: Social Studies, secondary level, individual teacher goal.

Population: 84 seventh grade students.

Timeframe: 12 weeks.

Assessment: Denver End of Course Exam.

Assessment Baseline: 100 percent of the students scored a "one" on the district seventh grade world history pretest.

Expected Student Growth: 80 percent of the students who attend 85 percent of classes or more will score a "three or better" on the district seventh grade world history post test.

Strategies: Experiential exercises; Cornell Notes; Writing, Inquiry, Collaboration, and Reading (WICR); Modified Document Based Questions; Philosophical Chairs; Commentary Writing; R.A.F.T.S. Graphic Organizers and Reciprocal Teaching.

Source: Denver Public Schools, Student Growth Objectives, at: http://sgoinfo.dpsk12.org.

3. **Assessment(s) of student progress.** At the core of the SLO is an assessment used to measure student progress toward that objective. A quality assessment connects teacher, student and expectations. The best guidance for implementing SLOs includes information on the attributes of high-quality assessments and tools to create them.[3]

[3] Guidance documents describing the SLO process often use the terms "valid and reliable" to describe the kind of assessments to be used. Without definition, the phrase is problematic because it has different meanings in different contexts. In the context of measuring student learning, an assessment described as "valid" measures what it intends to measure—a math test measures the student's proficiency in math and not another field of study, such as reading or science. In a word, it is credible. An assessment described as "reliable" yields consistent results—students with similar knowledge and skills will get similar scores. In a word, it is consistent. No assessment is perfectly valid and reliable. Many large scale assessments use psychometric methods to demonstrate they are relatively valid and reliable. Many SLOs for non-tested grades and subjects, however, will not be informed by assessments that have psychometric underpinnings. This does not rule out the use of an assessment for SLO purposes, however, even when designed for a single classroom by a single teacher. To create consistency, States or districts publish guidance for quality assessment. To ensure rigor, States or districts compare results on SLOs with other measures of student and teacher performance, looking for patterns of alignment that predict improved student results.

4. **Rigorous yet realistic expected student growth or achievement target to be met by the students.** Setting achievement targets requires teachers and their principals to understand assessment data, identify baseline student performance, and set challenging, realistic learning expectations for all of their students.

5. **Strong rationale for the expected student growth.** Teachers and their supervisors need to be able to provide an explicit rationale for the expected student growth target, including how and why the target is appropriate, rigorous, and uses the best available student assessment data to demonstrate attainment of the target. Some States and districts ask teachers and principals to articulate the specific State standards that an SLO is designed to measure and to which it is aligned.

SLOs Step-by-Step

1. Teachers review current student data before the school year begins.
2. Individual teachers or teams of teachers (by grade or subject area) develop one or more SLOs, based on their initial data analysis—focused targets that are ambitious but appropriate and achievable.
3. Principals or designated teacher evaluators review, provide feedback and approve objectives and targets.
4. Teachers and/or evaluators may do mid-course checks on teacher progress on SLO targets, as part of observations or conferences, for example.
5. Evaluator conducts a final review of teacher progress on SLO targets as part of annual teacher performance review.
6. SLO results are included with other measures in summative ratings for teacher performance.
7. Teacher and evaluator discuss progress and next steps, including setting new SLOs or adjusting SLOs for the following year.

6. **Strategies for achieving SLOs.** For an SLO to be an instrument of good instructional practice, not simply an evaluative tool, teachers need to be able to identify the specific approaches they will use in the classroom to meet the expectations set for student growth. Denver's SLO guidelines ask that teachers identify "observable or documentable strategies that are appropriate for learning content and skill level observed in assessment data produced throughout the year." Teachers are expected to continually examine and adjust those strategies based on data about student progress and student needs.

Why Consider SLOs as a Teacher Evaluation Strategy?

There are a number of advantages to using SLOs for teacher evaluations:

- **SLOs are good instructional practice.** SLOs are more than just a solution for measuring student performance in the context of teacher evaluation. Solid instruction begins with the analysis of student data followed by the development of targeted learning goals and instructional practices aimed at achieving them. SLOs provide schools and districts with a way to make this best practice a common expectation for the whole workforce of teachers and principals.
- **SLOs are adaptable.** SLOs are flexible and can be adjusted or revisited based on changes in standards, curriculum or assessments or shifts in student population and student needs.
- **SLOs may help educators buy in to State and district evaluation systems.** SLOs are usually grounded in the work done by teachers with their students in the classroom. Because SLOs are most often developed through principal-teacher collaboration, they may reinforce the credibility of the evaluation process and build ownership for student results among teachers and principals.
- **SLOs can be used not only in the case of individual teachers, but also with groups of teachers or the whole faculty.** A group of teachers all in the same subject area, grade or even district can use the same SLO. Entire school faculties can pursue the same objective, individually or collectively, setting expectations for student achievement that all teachers and school personnel share.

SLO Example: Music

SLO: Third grade music, individual teacher goal.

Population: 32 third grade students.

Timeframe: SY 2011–2012.

Assessment: District-developed written exam requiring reading and writing notes on a treble staff.

Assessment baseline: No students met or nearly met expectations on the pre-test. 80 percent of students earned a 2 out of 5 and 20 percent earned a 1 out of 5.

Expected student growth: 80 percent of the students will earn a 4 out of 5 (Meets Expectations) or better and 20 percent will score 3 out of 5 (Nearly Meets Expectations).

Strategies: Whole and small group instruction, peer-to-peer teaching using fourth-graders, one-on-ones, progress-monitoring, application of skill by teaching students to play the xylophone and recorder.

Adapted from Rhode Island Department of Education. Other examples of SLOs from Rhode Island can be found at: http://www.ride.ri.gov/educatorquality/educatorevaluation/Docs/RIModelGuide.pdf.

What Challenges Occur When Implementing SLOs and How Can States and Districts Address Them?

SLOs can be a high payoff instructional practice regardless of the stakes attached to them. It is fortunate, therefore, that they can be used to measure student learning in State and district efforts to measure teacher effectiveness. When using them in their evaluation systems, however, States and districts will have to address the challenges that attend them.

CHALLENGE: Developing and monitoring SLOs is time-consuming and difficult. For many teachers and administrators, SLO development and monitoring as well as assessment development will be new practices that require much support.

SLOs help focus that work in a new, results-oriented way that is grounded in the classroom experience. To support teachers and principals in SLO implementation, States and school districts must help them overcome these challenges by providing time-saving tools and efficient processes, as well as well-aligned materials and professional development.

SOLUTION: Develop an online library of SLO resources.

Certain districts and States, including Denver Public Schools and the Rhode Island Department of Education, provide online guidance on how to develop and implement SLOs. On these websites, interested parties can find subject-specific samples of SLOs, forms and timelines to support the process, checklists outlining key features of SLOs and rubrics to assess SLO quality. See http://sgoinfo.dpsk12.org and http://www.ride.ri.gov/EducatorQuality/EducatorEvaluation/SLO.aspx.

To help districts implement SLOs, New York has developed what it calls a "roadmap," available at www.engageny.org. Rhode Island provides evaluation guidance and handbooks for teachers and administrators as well as training videos (Georgia is currently producing training videos as well) and an accompanying PowerPoint that evaluators can use to guide teachers through the process of setting SLOs and evaluating their quality. Additional useful resources include frequently asked questions, online contact support and calendars that identify important deadlines for teachers and principals. See http://www.ride.ri.gov/EducatorQuality/EducatorEvaluation/SLO.aspx.

SOLUTION: Provide teachers and evaluators with thorough and rigorous professional development.

As with the implementation of any new practice, professional development will be critical to the success of SLOs. When using SLOs as a measure of student growth in the educator evaluation processes, States and districts may want to consider several areas for professional development:

- **Creating a coherent theory of action on how SLOs are intended to support instructional practice, student learning and school and district missions.** Professional development can include how SLOs reflect best instructional practice and how they should align to district, school, grade-level and team goals as well as college- and career-ready standards.
- **Choosing or developing and administering assessments.** Professional development can include how to identify and develop high-quality assessments that measure student progress in a particular discipline and how to link specific objectives to specific assessments.

- **Analyzing student data.** Teachers and principals need information about what data is available to them and how to interpret it, including how to identify achievement trends and the performance of specific subgroups of students, such as English language learners and students with disabilities. They also need to know how to use that data to develop appropriate individual, team, group or school-wide SLOs.
- **Writing high-quality SLOs.** Teachers and principals will need professional development on the basic components of SLOs and how to set appropriate but ambitious growth targets.
- **Connecting SLOs to other major initiatives.** Districts should integrate SLO professional development into their other instructional initiatives, such as the implementation of college- and career-ready standards. New York, for instance, is using Race to the Top-funded Network Teams to deliver SLO professional development as a way to articulate the pedagogical and academic expectations of the Common Core State Standards, data-driven instruction and turning around low-performing schools.
- **Preparing evaluators.** In States and districts where SLOs are developed collaboratively by teachers and principals, principals will play a critical role in ensuring their consistency and rigor. To that end, principals and other leaders supporting the development of SLOs need clear guidance on how to assess SLOs. Professional development should give evaluators opportunities to practice using a rubric to determine SLO quality and to learn how to provide teachers with the support and resources they need to develop high-quality objectives.
- **Providing ongoing professional development for everyone involved in the process.** Districts that have been implementing SLOs have shown that teachers and principals get better at the practice of setting them over time. Those districts offer continuing professional development, even to experienced practitioners. Ongoing professional development is informed by review of the previous year's SLOs and emphasizes continuous support and improvement.

Finally, SLO and assessment development training can begin in teacher and principal preparation programs. As appropriate, State departments of education and higher education can begin discussions with colleges, universities and alternative route programs about including SLO and assessment development in their curriculums.

CHALLENGE: It is hard to ensure the quality of SLOs and the assessments used to measure student learning.

Without question, it will be difficult to ensure consistency across classrooms, let alone school districts. In addition, since SLO attainment will be part of a teacher's summative rating, there may be an incentive to set low expectations. As a result of these challenges, the perception, if not the reality, will be that teachers of tested grades and subjects are held to a much higher standard.

SOLUTION: Regularly analyze and compare data from SLOs with teacher-level value-added data, teacher observation ratings and other measures that predict future student success.

This will develop alignment and encourage the improvement of all performance measures over time.

If the expectations for teachers of non-tested grades and subjects are or appear to be lower than those for teachers for whom value-added or other growth measure data is available, then the evaluation system will be perceived as unfair. Once States get their evaluation systems up and running, they and their local education agencies must review how teachers with SLOs in non-tested grades and subjects fare on

performance evaluations compared to teachers subject to a student growth model or value-added measure of performance. Cross-referencing data can help States and districts identify anomalies worth investigating and raise red flags on schools, districts, teachers in certain subject areas, or grades where patterns of SLO attainment rates in general, or in comparison with student growth rates, are unexpected, or appear too high or too low. States and districts should work to ensure that the success rates for teachers in non-tested grades and subjects are comparable to the success rates of those in tested grades and subjects. While this alignment may never be perfected, States should constantly pursue it as part of continuous improvement efforts.

SOLUTION: Provide support for evaluator calibration sessions.

Once SLOs are in place and principals begin to assign teacher evaluation ratings using SLO targets, States and districts can provide quality assurance by supporting calibration sessions to ensure that SLO quality and rigor is consistent across grade levels, subjects, schools and districts. Calibration sessions are forums that provide teachers and principals, including those who are in the role of evaluator, with opportunities to examine SLOs and make informed judgments about their comparability around their quality, including rigor. Building calibration sessions into a State or district SLO process can help instill confidence and promote consistency among principals/evaluators and promote peer accountability for rigor among school leaders.

SOLUTION: Set requirements or provide guidance for how to choose and develop high-quality assessments.

States and districts can provide guidance and/or requirements for choosing high-quality assessments to use in measuring SLO attainment. Some States are working on developing assessment item banks, and collecting assessment exemplars, particularly for non-tested grades and subjects, from schools and districts in the State, from third parties, and even from other States. Georgia requires that at least three educators participate in the development of assessments used to measure the attainment of SLOs, a process that is supported by an SLO Technical Criteria Table the State designed to help teachers and administrators create valid and reliable assessments and to revise them after they have been administered.

Rhode Island uses an assessment audit and approval process for any objective that will be measured using a school-based assessment, i.e., one that is not used by any teachers outside of a particular school. New York provides a list of State-approved assessments for use by school districts as local measures in teacher and principal evaluations.

SOLUTION: Spot check SLOs.

States and districts rarely have the capacity to review all SLOs unless they are limiting the number that can be created. The same tools used to provide teachers, principals and district personnel with guidance on how to develop high-quality SLOs can be used by States and districts to spot-check for their quality. States or districts can randomly select and review SLOs, and give feedback to improve them. They can also examine patterns of SLO attainment, including disproportionate SLO attainment by certain schools or in certain subject areas, to flag objectives that ought to undergo a thorough quality review.

SOLUTION: Hold administrators accountable for SLO quality.

Although the development of SLOs is typically a collaborative process, States and districts must set policies for who has final approval of an SLO and will be held accountable for its quality. In Rhode Island, administrators must certify SLOs, attesting to their quality. In Georgia, the Department of Education must approve all SLOs. Finally, the quality of SLOs developed by teachers in a school can be included as a performance measure in principal evaluations.

Quality Control

As they go forward, States and local education agencies will develop additional innovations to ensure quality control of the SLO process. New York's evaluation regulations specify that assessments used as evidence for SLO attainment may not be scored by teachers and principals with a vested interest in the outcome of those assessments. Further, New York and Georgia are experimenting with district-developed and even State-approved SLOs as a way to promote quality—when most early adopters of SLOs develop and approve them at the school level. Continued innovations in States and districts should lead to new and better ways to ensure high-quality SLOs across the board.

Where Can I Find Practical Resources on SLOs?

For more information about SLOs, including resources that can help your State or district implement them, see:

Denver Public Schools

http://sgoinfo.dpsk12.org

This site includes sample student growth objectives, a rubric for assessing the quality of student growth objectives, a video for teachers on developing objectives, handbooks on student growth objectives for teachers and school service professionals, and worksheets to help teachers examine data and write objectives.

New York State Department of Education

www.engageny.org

This site's section on "teacher/leader effectiveness" includes district and teacher "roadmaps" for implementing SLOs, State-approved teacher and principal practice rubrics, and a webinar series on SLOs. Included are detailed formulas for how SLOs are to be integrated into a teacher's overall evaluation rating. A list of State-approved assessments for local evaluation measures can be found at: http://usny.nysed.gov/rttt/teachers-leaders/assessments/home.html.

Rhode Island Department of Education

http://www.ride.ri.gov/EducatorQuality/EducatorEvaluation/SLO.aspx

The Rhode Island Department of Education provides a wealth of practical information and resources on SLOs. The site includes subject- and grade-specific examples of SLOs, resources for SLO professional development, model SLO forms for teachers and principals, frequently asked questions, webinars and detailed policy and resource manuals for teachers and administrators.

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