

Let's SLO Down: Making Student Learning Objectives Meaningful for All



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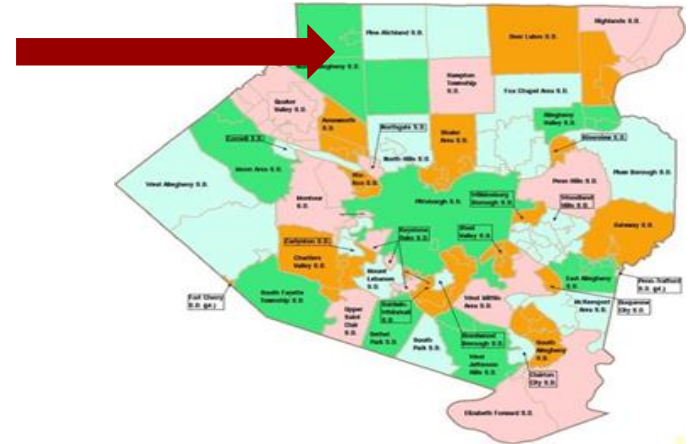
Student Achievement



The key to improved student achievement was moving beyond an individual teacher looking at his or her classroom data. Instead, it took getting **same-grade teacher teams** to meet, analyze the results of each interim assessment to **understand** what concepts in the curriculum were posing difficulty for students, **share ideas**, figure out the **best interventions**, and actually **follow-up in their classrooms** (Christman et al., 2009).

North Allegheny School District

- Located 12 miles north of Pittsburgh, PA
- Serves 4 communities over 48 square miles
- Largest suburban school district in Allegheny County with 8,300 students
- 12 school buildings
 - 7 elementary schools (K-5)
 - 3 middle schools (6-8)
 - 2 high schools (9-10 & 11-12)



About a year ago...

We had to “SLO” down and create SLOs.

- PDE required SLOs of school districts
- SLOs filled a void for non-tested areas (at first)
- SLOs provided more data before three-year rolling averages were ready
- Templates were rolled out for teacher use
- Growth evolved and surpassed Mastery
- Rules changed and required Mastery AND Growth

Getting started

We were proud that we had a place to start:

- Strong unit-based curriculum
- Curriculum management tool (Rubicon Atlas)
- Student achievement
- Educator Effectiveness underway (TowerMetrix)
- PVAAS understanding
- Cooperation with our Intermediate Unit (AIU3)
- Intranet on our District's website (Schoolwires)
- Department leadership

Common Assessments and *Not So Common Assessments*

“We made one of those tests a few years ago, but I changed mine to make it better.”

“We give the same test, but she gives it as a take-home test, and I make it worth double points.”

“Does it have to be a test or can we use another measure?”

“Are we going to use this again next year?”

When your Assistant Superintendent freaks out



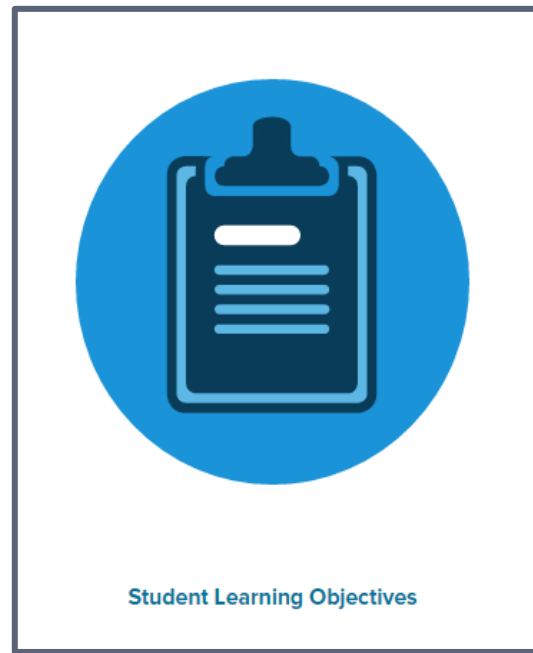
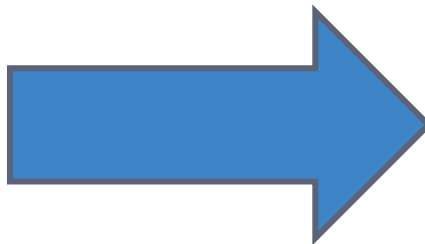
The research shows:

Reviews of accountability data from hundreds of schools reveal the schools with the **greatest gains in achievement** consistently **employ common assessments**, nonfiction writing, and **collaborative scoring by faculty** (Reeves, 2004).

**So what did
we do?**



www.pdesas.org



Student Learning Objectives For Teachers

Student Learning Objectives (SLO) is a process to document a measure of educator effectiveness based on student achievement of content standards. SLOs are a part of Pennsylvania's multiple-measure, comprehensive system of Educator Effectiveness authorized by Act 82 (HB 1901).

› User Guide

› Training Modules

› Training Module Notes

› Handouts

› Templates

› Template Helpdesk Documents

› Models

› CDT Model

› Review Tools

› School Leader Materials

User Guide

📄 SLO Users Guide - June 2014 - Working Draft - R



Template Help Desk Documents
were extremely helpful.

Help Desk Documents

Help Desk: Section 1

This page provides detailed guidance to Section 1 of the Pennsylvania Department of Education's *SLO Process Template*.

Element	Definition	Format	Example
1a. Name	Educator's full name	First, M. Last	Jan L. Rodriguez
1b. School	Name of school(s) to which the educator is assigned during the current year	Full Name(s)	Dunham High School Dunham Elementary School
1c. District	Name of district to which the educator is assigned during the current year	Full Name	Dunham Area SD
1d. Class/Course Title	Name of the class/course content area upon which the SLO is based	Full Name(s)	Physical Education Algebra II Art ELA (Writing) Math (Measurement)
1e. Grade Level	Grade level(s) for those students included within class/course identified in Element 1d.	Numeric values/Text	11 (Single Grade) 3, 5, 7 (Multiple Grades) K (Kindergarten) 9th-12 (4-year-old students)
1f. Total # of Students	Aggregate number of students (estimated, across multiple sections) for which data will be collected and applied to this SLO.	Numeric values only	21 (Single class/section) 120 (Multiple classes/sections)
1g. Typical Class Size	The "average" number of students in a single session of the class/course identified in Element 1d.	Numeric values only	4 20 30
1h. Class Frequency	The frequency and time frame in which the class/course identified in Element 1d is delivered.	Numeric and text values for each unique class/course (# of sessions) per (week, 3 day cycle) for (one semester, 32-day rotation) equating a total of (4) sessions	5 sessions per week for one year equating a total of 180 sessions. 3 sessions per 9 day cycle for one semester equating a total of 45 sessions.
1i. Typical Class Duration	The average number of minutes allocated to deliver a "session" of the class/course identified in Element 1d.	Numeric values only	120 (content area taught within a day-long self-contained classroom) 45 (typical secondary course delivery model)

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Example

(Foreign Language)
Students will demonstrate effective communication in the target language by speaking and listening, writing, and reading.

(Physics)
Students will demonstrate their understanding of the concepts of force, the conservation of energy, and the conservation of momentum by explaining the motion of different moving objects.

PA Standards
3.2.B Physics Standards
3.2.10.B1
(Physics) [3.2.10.B.1](#)

PDE CID 12.0500 Instructional Field Worker Task Grid tasks 2222, 2224, 2225

Professional Standards
ACTPL 1.1, 1.2, 1.3

(Foreign Language)
Speaking, reading, and writing are integral to second language learning, as they demonstrate the ability to communicate in the target language.

(Physics)
PA Academic Standards for Science and Technology and Engineering Education identify the concepts of force, the conservation of energy, and the conservation of momentum as big ideas in physics. The concepts of force, the conservation of energy, and the conservation of momentum form the basis of classical physics and are often applied in engineering and other related disciplines.

Help Desk: Section 3

Section 3 of the Pennsylvania Department of

	Format	Example
Formative assessment section 4a	Narrative text	HS Choir Individual Vocal Assessment Task Physics Force Concept Inventory
Formative assessment section 4b	Select box <input checked="" type="checkbox"/> (Multiple boxes can be selected to describe a single Performance Measure)	<input checked="" type="checkbox"/> District-designed Measures and Examinations <input checked="" type="checkbox"/> Nationally Standardized Tests <input checked="" type="checkbox"/> Industry Certification Examinations <input checked="" type="checkbox"/> Student Projects <input checked="" type="checkbox"/> Student Portfolios <input type="checkbox"/> Other
Each address	Narrative text	Physics Force Concept To measure student understanding of fundamental concepts in Newtonian mechanics. 3rd Grade Math Measurement Data Project The data project is intended to measure student proficiency of using appropriate tools to collect and interpret data.
Formative assessment	Select box <input checked="" type="checkbox"/> (Select only one box)	<input checked="" type="checkbox"/> Growth (change in student performance across two or more points in time) <input checked="" type="checkbox"/> Mastery (attainment of a defined level of achievement) <input type="checkbox"/> Growth and Mastery
School year use or limited equity	Narrative text	World Language Speaking Assessment during the last quarter of the instructional period. Physics 3rd 41 - Force Concept Inventory Prior to the start of the unit on forces and at the end of the unit on forces.

	Example
Formative assessment section 4a	<input checked="" type="checkbox"/> IEP <input type="checkbox"/> ELL <input type="checkbox"/> Gifted <input type="checkbox"/> Other
Formative assessment section 4b	Open space suitable for theatrical performance Access to books, journals, and online resources for research, scripts, and theatrical text.
Formative assessment section 4c	HS Choir Individual Vocal Assessment Task Rubric Physics Force Concept Inventory Scoring Key Family & Consumer Science Meal Planning Task Checklist
Formative assessment section 4d	Physics Roller Coaster Energy Project Can be administered and scored by a Certified Physics Teacher. HS Choir Individual Vocal Assessment Task Can be administered by the student and scored by a Certified equivalent Choral Music professional.
Formative assessment section 4e	World Language Speaking Assessment Summary report of students who met the performance indicator. HS Choir Individual Vocal Scoring Task Summary list of students who achieve the performance indicator.



We defined key terms.

- **Goal** - Standards-based “Big Idea” (essential concept) upon which the SLO is based
- **Performance Measure** - Common assessments used to measure the SLO (growth, mastery, or both)
- **Performance Indicators** - Expected level of achievement for each performance measure

We provided direction.



Teachers (department/grade level) composed a **goal**.

- Decisions were made regarding which courses and common assessments.

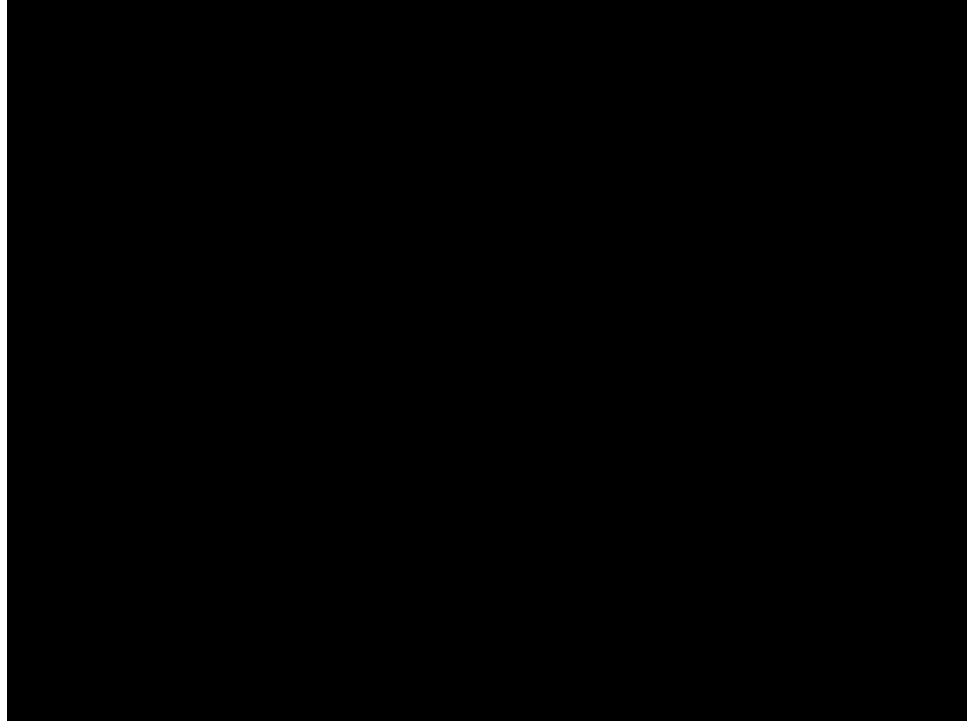
Teachers (department/grade level) selected **performance measures**.

- The performance measures will then be aligned to performance indicators. We asked for two PMs.

Individual teachers set **performance indicators** .

- Each performance indicator was a reasonable expectation that utilized data.
- The SLO contained multiple measures for reliability.

This required collaboration...which isn't always easy.



When your Assistant Superintendent freaks out

Powerful, proven structures for improved results are at hand. “It starts when a **group of teachers meet regularly as a team** to identify essential and valued student learning, develop common formative assessments, analyze current levels of achievement, set achievement goals, and then share and create lessons and strategies to improve upon those levels.” (Schmoker, 2004b, p. 48).

Important Considerations



SLOs should:

- Represent the **diversity of students** and courses/content areas taught.
- Align to a set of **approved indicators/targets** related to selected academic content standards.
- Be based upon **two time-bound events/data collection periods** and/or performance-defined levels of “mastery.”
- Be supported by **verifiable data** that can be collected and scored in a standardized manner.
- Include a set of **independent performance measures**.

Leading the process



SHARE
THE ROAD

Central Office

- Provided professional development
- Established parameters for Goals, Performance Measures, and Performance Indicators
- Reviewed templates and assessments
- Provided feedback
- Conducted a role-play of pre- and post-conferences with principals

Department Chairpersons & Elementary Facilitators

- Worked with teachers to identify content to be assessed
- Used in-service time to develop and or select assessment(s)
- Completed the Template from PDE

Webmaster & Secretary

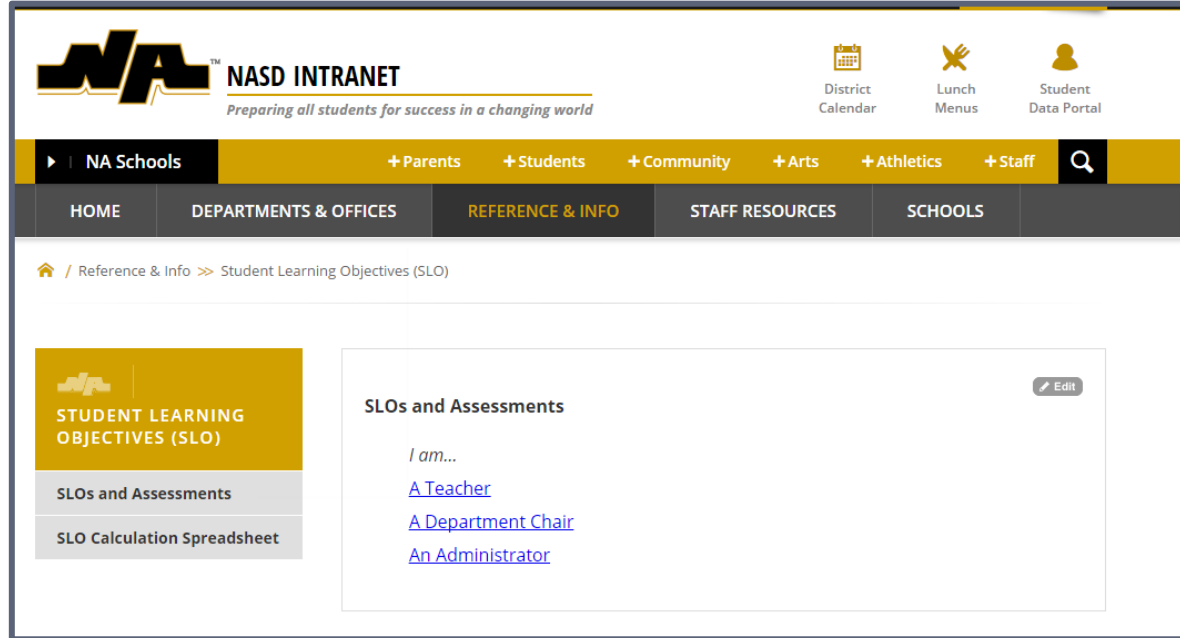
- Posted all templates and assessments

Principals

- Scheduled pre- and post-conferences
- Assisted teachers with establishing the Elective Rating prior to assessments

Making it Manageable

A web page on our staff only Intranet which provides different levels of access to SLO templates and assessments.



The screenshot displays the NASD Intranet website. The header features the NASD logo and the text "NASD INTRANET" with the tagline "Preparing all students for success in a changing world". Navigation links include "District Calendar", "Lunch Menus", and "Student Data Portal". A secondary navigation bar contains "NA Schools", "+ Parents", "+ Students", "+ Community", "+ Arts", "+ Athletics", and "+ Staff". A main navigation bar includes "HOME", "DEPARTMENTS & OFFICES", "REFERENCE & INFO", "STAFF RESOURCES", and "SCHOOLS". The current page is "Reference & Info >> Student Learning Objectives (SLO)". The page content includes a sidebar with "STUDENT LEARNING OBJECTIVES (SLO)", "SLOs and Assessments", and "SLO Calculation Spreadsheet". The main content area is titled "SLOs and Assessments" and contains the text "I am..." followed by three links: "A Teacher", "A Department Chair", and "An Administrator". An "Edit" button is visible in the top right corner of the main content area.

In October 2015, changes occurred.

SLO Guidance for 2015-2016

Question: Are the revised templates mandatory for all educators?

- LEAs are strongly encouraged to consider revising their SLO to reflect growth. LEAs do not need to use the new template. However, they should go back and revisit SLOs developed for the 2015-2016 school year and include baseline data to demonstrate growth.
- USDE requires that PDE collect summative evaluation data from LEAs in the annual evaluation collection. As a result of the waiver, PDE will be required to report to USDE aggregate component specific data. Therefore, teacher specific and elective SLO growth for teachers and principal SLO growth will be required data elements for the 2015-2016 school year data collection. LEAs will be responsible for submitting these data.

SLOs now must include baseline data to demonstrate growth.



Options for Demonstrating Growth



Growth PM – Half to 100 (Using percentages)

Students will demonstrate growth on the assessment by cutting the gap to 100% in half or by scoring 90% or higher on the post-assessment.

Target = (gap to 100%)x.5 + (pre-test score) OR
achieving 90% or more



Growth PM – Half to 100 (Using percentage)

Student	Pre-Assessment Score	Gap to 100%	Post-Assessment Target	OR: Post-Assessment Target of 90% or Higher
Student A	10%	90%	55% = $(90 \times 0.5 + 10)$	90% or more
Student B	20%	80%	60% = $(80 \times 0.5 + 20)$	90% or more
Student C	50%	50%	75% = $(50 \times 0.5 + 50)$	90% or more
Student D	80%	20%	90% = $(20 \times 0.5 + 80)$	90% or more

Growth PM – Half to 100 (Using Raw Score)

Students will demonstrate growth on the post-assessment by **cutting the gap of 50 pts. out of 50 pts.* in half or by scoring 45 pts. out of 50 pts., which is the equivalent of 90% or higher on the post-assessment.**

Target = (gap to 100%) x .5 + (pre-test score)

OR achieving the equivalent 90% or more



Growth PM – Half to 100 (Using raw score)

Student	Pre-Assessment Raw Score	Gap to a score of 50/50 max points	Post-Assessment Target	OR: Post-Assessment Target of 90% or Higher
Student A	10	40	30 points = $40 \times .5 + 10$	Min. 45/50 pts.
Student B	20	30	35 points = $30 \times .5 + 20$	Min. 45/50 pts.
Student C	50	0	50 points = $0 \times .5 + 50$	Min. 45/50 pts.
Student D	32	18	41 points = $18 \times .5 + 32$	Min. 45/50 pts.

NOTE: This example uses a 50-point assessment. The targets are raw score targets.

Growth PM – Using a Rubric

Students will demonstrate growth by **advancing to the next level on a rubric from the pre- to the post-assessment or by scoring “Advanced.”**

4 categories (ranked highest to lowest)

- Advanced*
- Proficient
- Emerging
- Novice

**If Advanced in pre-test, is there still room for growth?*



Growth PM – Using a Rubric

Student	Pre-Test Score	Target
Student A	Emerging	Proficient
Student B	Proficient	Advanced
Student C*	Advanced	Advanced

If Advanced in pre-test, *is there still room for growth?*

If so, student should attempt to grow. Full credit for that student is still issued.

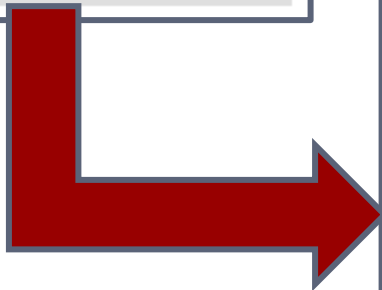
Calculating Elective Ratings



STUDENT LEARNING
OBJECTIVES (SLO)

SLOs and Assessments

SLO Calculation Spreadsheet



SLO Elective Rating Calculation							
Performance Measure #1				Performance Measure #2			
Total Number of students in SLO for performance measure #1	<input type="text"/>			Total Number of students in SLO for performance measure #2	<input type="text"/>		
Number of students meeting Performance Target #1	<input type="text"/>			Number of students meeting Performance Target #2	<input type="text"/>		
Weight for Performance Target #1 (enter as decimal)	<input type="text"/>			Weight for Performance Target #2 (enter as decimal)	<input type="text"/>		
Elective Rating Percentage	#DIV/0!						

Let's SLO down one more time

THE POTHOLES WERE WORTH IT!

"[Common formative assessments provide] regular and timely feedback regarding student attainment of the most critical standards . . . [and] also foster consistent expectations and priorities within a grade level, course, and department regarding standards, instruction, and assessment. . . . Most importantly, common formative assessment results enable educators to diagnose student learning needs accurately in time to make instructional modifications." (Ainsworth, 2007, pp. 95–96)

...but they also use data to inform teachers' practice, to discuss why one teacher is having success in teaching a concept and others are not, and what the more successful teacher can teach his or her colleagues (Chenoweth, 2009).



So what if SLOs go away?

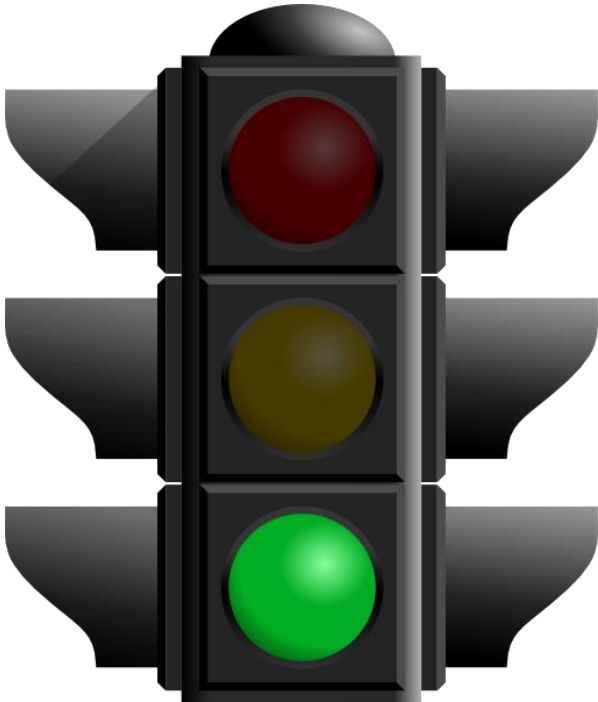
We have learned a few **valuable** lessons:

- The value of collaboration and “commonness”
- The need for horizontal and vertical alignment of curriculum
- The complex practice of gathering and analyzing data
- The strength of internal leadership
- The complexity of change management
- *We underestimated how long this process took to complete for teachers, principals, and secretaries!*

We won't stop now!!!



Time to GO!



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