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"Making Education Work for All Georgians"

Student Learning Objectives Operations Manual

Georgia Department of Education
SLO Operations Manual
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Introduction

In an effort to ensure that all schools and classrooms have great leaders and great teachers, Georgia has established the Teacher Keys Effectiveness System (TKES) and the Leader Keys Effectiveness System (LKES). As shown in Figure 1, the TKES Effectiveness System consists of three components which contribute to an overall Teacher Effectiveness Measure (TEM): Teacher Assessment on Performance Standards (TAPS), Surveys of Instructional Practice, and Student Growth and Academic Achievement.

Figure 1: Teacher Keys Effectiveness System
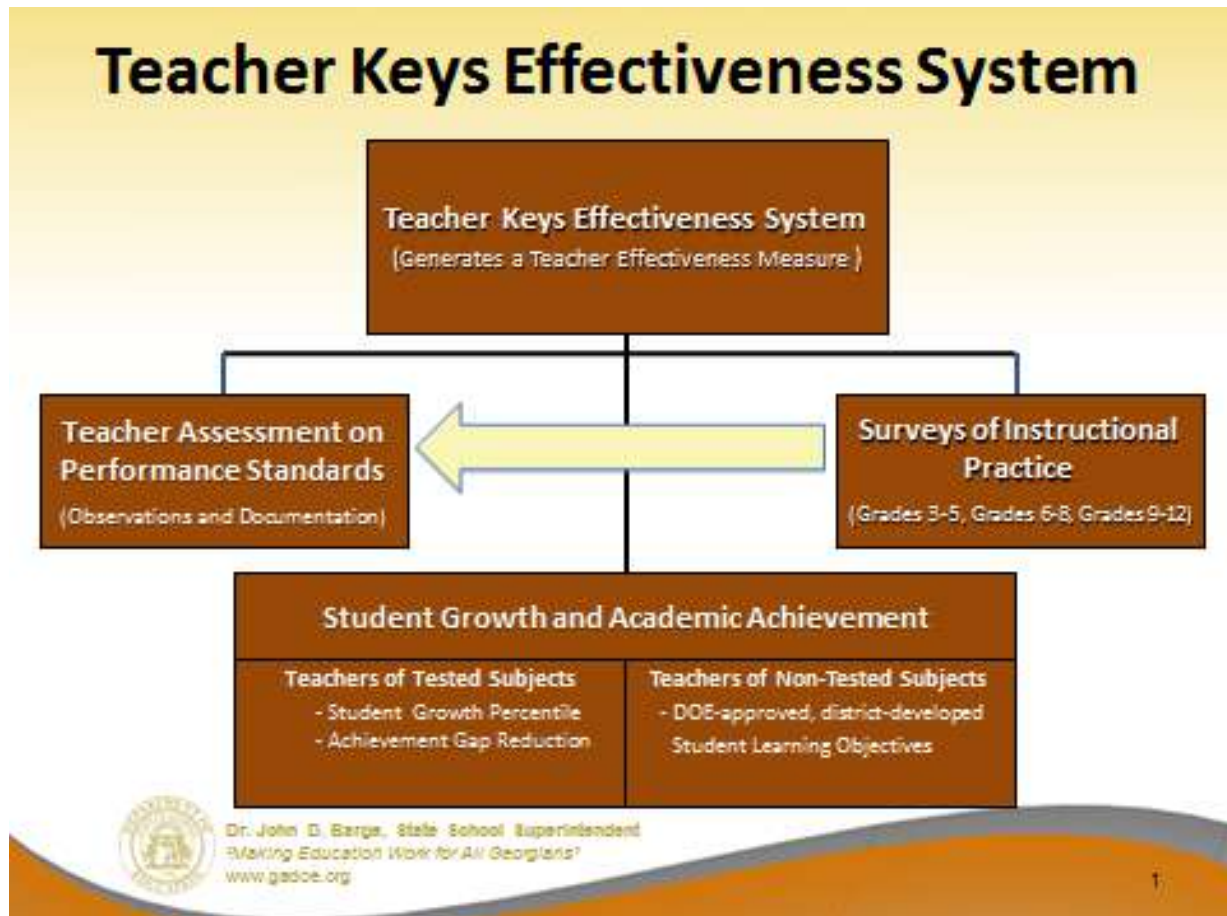
Student Growth and Academic Achievement

Student learning is the ultimate measure of the success of a teacher and an instructional leader. A vital component of the Teacher Keys Effectiveness System is Student Growth and Academic Achievement. For teachers of **tested** subjects, this component consists of a student growth percentile measure. Tested subjects include reading, English language arts, mathematics, science, and social studies for grades 4-8 and all high school courses for which there is an End-of-Course Test (EOCT).

Non-tested subjects include all courses not listed as tested subjects. Approximately 70-75% of all teachers teach non-tested subjects for at least some portion of the instructional day. For teachers of non-tested subjects, this component consists of the Georgia Department of Education (GaDOE) approved Student Learning Objectives (SLO) utilizing district-identified achievement growth measures.

The focus of this manual is the implementation of the Student Learning Objectives development process. The professional practice of utilizing SLOs to measure student growth is the cornerstone of the GaDOE's emphasis on using assessment results to guide instruction. Research indicates that educators who set high quality objectives realize greater improvement in student performance. Establishing this systematic approach will require unprecedented collaboration among state leaders, district leaders, and local school staffs. Curriculum, assessment, and technology leaders in the district and classrooms collaborate to create SLOs for appropriate courses. Each district SLO is submitted to the GaDOE for audit review and approval.

Student Learning Objective Overview

What is a Student Learning Objective (SLO)?

District determined SLOs are aligned to curriculum standards focused on student growth. SLOs give educators, school systems, and state leaders an additional means by which to understand, value, and recognize academic success in the classroom.

Purpose of SLOs

The primary purpose of SLOs is to improve student achievement at the classroom level. An equally important purpose of SLOs is to provide evidence of each teacher's instructional impact on student learning.

SLO Requirements

1. SLOs will be written for all non-tested courses in Pre-K through grade 12.
    This includes:
    a. All subjects in Pre-K through grade 2 (e.g., ELA, mathematics, science, social studies, fine arts, etc.) are defined as non-tested subjects.
    b. All subjects in grade 3 are considered non-tested because there is no prior test score on which to determine Student Growth Percentile (SGP).

2. Each district designed SLO will be course specific and will be used in the evaluation process for all teachers of that course. SLOs are designed for the course, not individual teachers.

3. Teachers who teach both tested and non-tested subjects will be evaluated by SLOs for their non-tested subjects and by the SGP measure for their tested subjects.

4. If a teacher teaches the same course multiple periods/sections during the day, all students are included in the same SLO.

5. SLO results are reported at the student and class/group level. Districts will determine the process of entering SLO student data information with guidance from the GaDOE.

6. Districts will submit SLOs on the TLE Electronic Platform for GaDOE audit review and approval no later than August 2, 2013. A separate submission should occur for each SLO.

7. Prior to the submission the superintendent or designee will verify that each SLO is complete, aligned with content standards, and has rigor that is comparable to the standardized measures for tested subjects. Each superintendent or designee will verify that all district SLOs are complete prior to submission to the GaDOE.   A copy of pre and post assessments must be maintained at the district level. GaDOE personnel will collect these documents during October. If Content Alignment Forms are completed during the development of pre and post assessments, these will also be collected.

Overview of the SLO Process

Figure 2: Overview of the SLO Process
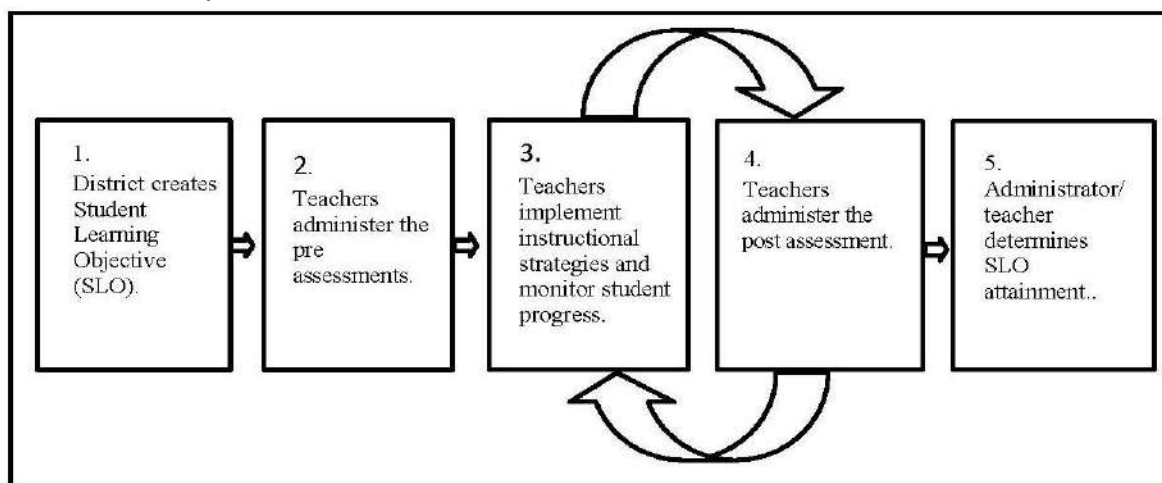
1. Districts, in collaboration with teachers and school leaders, examine current data and historical data to determine the focus of the SLO for specified courses. Prior to the instructional period, districts develop an SLO based on the needs of students as they relate to the specified course. Districts will submit SLOs on the TLE Electronic Platform for GaDOE audit review and approval. A separate submission should occur for each SLO.

2. Teachers administer the pre assessment. Using the approved district SLO for the specified course, teachers complete the Teacher SLO Implementation Plan which is located on the TLE Electronic Platform. Evaluators and teachers meet to discuss the teacher's SLO Implementation Plan during the annual pre-evaluation conference.

3. Teachers and their evaluators will review student progress during the annual mid-year evaluation conference. One purpose of this review is to determine if all students are on track to meet their growth targets or whether additional instructional interventions are warranted. Progress monitoring should be an on-going process engaging both teachers and evaluators and should occur at regular intervals in various settings.

4. Teachers administer the post assessment.

5. At the end of the instructional period, the evaluator and teacher meet to review student data and progress. The evaluator submits the data to the GaDOE.

Essential SLO Components

Focus on student learning

Student Learning Objectives require that teachers, principals, and districts pay close attention to the annual academic progress made by students in non-tested subjects. District SLOs are determined using baseline data.

Aligned with curriculum standards

SLOs must correlate with the Georgia Performance Standards (GPS), Common Core Georgia Performance Standards (CCGPS), or other national standards for the course being taught. Courses that utilize other curricular expectations must also be aligned to those identified expectations.

Interval of instructional time

The interval of instruction is the length of time during which the SLO will be completed. Districts determine the pre and post assessment administration windows for each SLO. SLOs should be written for the entire length of the course being taught. For the majority of teachers, the instructional period is the full academic year. However, for teachers with courses that span only part of the academic year, the instructional period will be the duration of that course (e.g., a semester). The interval cannot change once approved.

Scope of SLOs

It is a district's decision as to whether the SLO comprehensively addresses all course standards or addresses a prioritized set of standards. If a district chooses a set of prioritized standards, teachers are expected to teach all of the standards for the course and not exclude standards not assessed in the SLO.

Measureable objective

A measureable objective is one that quantifies growth in student learning, typically based upon the results of administration of pre and post assessments. Pre and post assessment scores are reported for each student in each teacher's class.

Assessments and measures

An assessment is the instrument used to measure student learning of the chosen standards. Each SLO must utilize a method to measure student growth. Pre and post assessments are most often used to provide this data. Appropriate measures of student learning gains differ substantially based on the learners' grade level, content area, and achievement level. Therefore the type and format of assessments will vary.

Commercially developed and validated assessments that correlate with the standards selected for each SLO may be used as the assessment to support the SLO. (Examples of externally-developed assessments include Lexile Framework for Reading, DIBELS, etc.) Externally developed assessments are selected, purchased, and used at each district's discretion. The GaDOE does not recommend any particular assessments nor does the GaDOE endorse any particular product or assessment.

If aligned with the SLO selected standards, the following measurement tools may be appropriate for assessing student progress:

- Inventories, and screeners (e.g., Scholastic Reading Inventory, Phonological Awareness Literacy Screening)
- School-adopted interim/common/benchmark assessments (e.g., county benchmark tests based on selected state standards, etc)
- Authentic measures (e.g., recitation, performance) using district- developed performance scoring rubrics
- Regionally/locally developed common assessments
- All district-developed SLO assessments must be reviewed utilizing the GaDOE Table of Specifications and the Criteria Table. These two forms must be submitted to the GaDOE on the TLE Electronic Platform during the SLO audit review and approval process.

Assessments should be selected and/or developed based on their appropriateness for the grade and content standards chosen for the SLO. Assessments may include written assessments, performance assessments, or work products.

Design and Construction of SLO Statement

SLOs should describe observable behavior and/or measurable results that occur when an objective is achieved. The acronym SMART (Figure 3) summarizes a structure to self-assess an objective's feasibility and worth.

Figure 3: SMART Acronym for Developing Student Learning Objectives

Specific: The objective is focused by content standards; by learners' needs.
Measurable: An appropriate instrument/measure is selected to assess the objective.
Appropriate: The objective is within the teacher's control to effect change and is a worthwhile focus for the students' academic year.
Realistic: The objective is feasible for the teacher.
Time limited: The objective is contained within a single school year or instructional period.

Specified components of the district SLO include the following:

1. Course name/number
2. Pre and post assessment administration dates or windows
3. Skill or content area to be measured
4. Type of assessment measure

Considerations when writing SLOs

- SLOs must be growth objectives not achievement objectives. SLOs should be designed and written so that individual student growth between the pre assessment and the post assessment can be determined.
- Growth objectives specify the growth target for all students. Therefore, 100% of the students in the course will be included in the SLO and its growth targets. In contrast, achievement objectives specify a percentage or number of students who would attain a specified level.
- The SLO growth target(s) for students should reflect a realistic but rigorous expected level of growth. SLOs should also include the highest performers in the district population. This can be done by adding a "maintain" statement and including an additional task for advanced learners as needed.
- SLOs are written so that teachers implementing the SLOs are clear on what to do and when to do it.
- Well-designed and rigorous SLO growth targets will increase student achievement and positively impact school and district goals.
- The language of the assessment(s) is reflected in the SLO. For example, if the assessment uses performance levels, a score on a 100-point test, etc. congruent terminology should be used in the SLO.

Assessment: The Foundation of Quality SLOs

Content Alignment Form

Districts identify the standards to be assessed by the SLO for each course. The content of pre and post assessments is driven by these selected standards, the level(s) of cognitive demand required by the standards, and the emphasis/time devoted to the instruction of the selected standards. The first step in creating or evaluating valid and reliable assessments is to analyze the standards. The GaDOE developed the Content Alignment Form to facilitate this process.

Content and skills: Each standard should be examined to determine the knowledge or content students are expected to acquire or demonstrate. Likewise, the skills or behaviors which students are expected to apply or use to achieve the standard should be examined.

Cognitive demand: The level of cognitive demand is the expected level of thinking when engaged with the content. For the purposes of SLO assessments, the GaDOE is encouraging the use of Webb's Depth of Knowledge (DOK) because all CCGPS formative assessments are aligned to DOK.

Table of Specifications

The Table of Specifications (TOS) for assessment design and evaluation is used to align the standards, content, cognitive demand, and emphasis to the assessments. The Table of Specifications also includes types of assessments and assessment items which most effectively ascertain the students' knowledge and skills required by the selected standards. Types of assessments or assessment items might include the following: short answer, project(s), essay, performance, or multiple choice.

Validity of assessments and assessment items

Validity is the most important consideration in assessment design and evaluation of assessments. A valid assessment measures what it is intended to measure. Validity also refers to the level of confidence and trust in the judgments that educators can make about student learning as a result of the assessment. Conscientious use of the Table of Specifications by a team of educators is one of the best methods for increasing and judging the validity of assessments.

Reliability of assessments

Reliability refers to the consistency of a measure. A test is considered reliable if the same results are obtained in a predictable manner over time and /or multiple administrations. The goal is to design assessments that are increasingly reliable.

Creation of assessment(s)

Districts should decide on the types and number of assessment items that will comprise the pre- and post- assessments. Performance tasks and rubrics may also be used for pre and post SLO assessments. A reasonable amount of class time should be allotted for pre and post assessments, typically one to two class periods. The Criteria Table, as well as other sources can provide guidance with developing and evaluating assessment items.

Criteria Table

The final step of the assessment development process is to conduct a thorough review and evaluation of the assessment created. The Criteria Table is a tool designed to guide districts through the process of reviewing the assessment items, formatting, administration, and results.

Post item analysis

After assessments are administered, the district team conducts an item analysis of the results. Assessment teams use student results to determine if items are to be retained, revised, or removed.

Using the Criteria Table for the development and evaluation of quality assessments is an effective way to evaluate the reliability and validity of the assessment items.

Data analysis

The most important step of assessment usage is data analysis. Evaluators and teachers analyze the data to inform subsequent planning and instruction.

Integrity of SLO Process and Results

Opportunities to misrepresent student data or inappropriate interactions with students to affect pre and post assessment results may be minimized by:

- The use of signed assurances (See Appendix C)
- On-going, systematic triangulation of formal and informal data by evaluators (observations, report card grades, tests, walk-throughs, documentation of teacher work). SLO data should be somewhat consistent with other student data.
- Collaborative planning of groups of teachers around SLOs results/implementation
- Use of electronic item bank
- Use of interchangeable passages, scenarios, numbers, etc. in assessment items
- Increased use of performance tasks
- Use of sampling to ensure consistency of raters

SLO Audit Review and Approval

Once districts have completed all of the required SLOs, the SLOs will be submitted to the GaDOE for audit review and approval. The SLO Approval Rubric criteria will be used to determine whether revisions are necessary or whether the SLOs will be approved. Please refer to the timeline (See Appendix A) for specific dates associated with 2013-2014 SLO approval process.

How to Develop Districts SLOs

Each district SLO will be submitted using the TLE Electronic Platform. Below is a description of the fields of information needed to complete the computerized submission.

The Standards

Determine which standards are most important for the students' and teachers' focus for the given instructional period (typically a school year or semester). List the standard reference number and a brief description of the standard(s).

Based on the district/school data and needs assessment, district team(s) should determine the appropriate state and national standards that will provide the basis for SLO development. Alignment of the SLO to standards is not only required for reference but is also important to ensure validity. District-selected standards should warrant the year-long or course-long focus of the students and teachers and should be rigorous and measureable. It is up to the district to determine whether all standards are included or if 5-15 over-arching standards are selected to determine teacher effectiveness.

- **The following questions should be considered when selecting standards:** Do these standards focus on content and/or skills that capture the majority of the instructional period? Do these standards provide students with essential knowledge and skills that are necessary for success in the next level of instruction or next grade level?
- **Content and skills:** Each standard is examined to determine the knowledge or content students are expected to acquire or demonstrate such as vocabulary, critical details, definitions, key facts, concepts, laws and formulas, sequence and timelines. Likewise, the skills or behaviors which students are expected to apply or use to achieve the standard should be examined. Such skills may include listening, speaking, writing, thinking skills (e.g., compare, infer, analyze), research skills (e.g. inquire, investigate), and study skills (e.g. note-taking, outlining).
- **Cognitive demand**: The level of cognitive demand is the expected level of thinking when engaged with the content. Determining the level of cognitive demand ensures that the SLO focuses on the subject matter/content. It also provides parameters which will enable students to use the content in ways dictated by the standards.

Pre and post assessment measures

A brief description of the pre and post SLO assessment measures should be provided. The assessment should be identified as locally/regionally developed or as a commercially developed assessment.

The quality of an SLO depends on the quality of the assessments used to determine student growth. The validity of an assessment is, to a large degree, dependent on how well the assessment measures the students' learning of the determined standards.

Districts should explore formative and summative measures that are currently in place to determine if those measures could be used or adapted as valid SLO assessments. Commercial assessments are selected, purchased, and used at the district's discretion. The GaDOE does not recommend any particular assessment or provide any such endorsements. Districts must adhere to the guidance provided when using commercial assessments. These assessments should be used according to the manufacturer's or designer's requirements for administration, fidelity of implementation, and limits of interpretation.

Selected assessments should measure growth. Quality assessments not only provide a pre and post score/result but are also used to drive the teachers' instruction between the pre and post assessment results.

Baseline or trend data

Baseline data, previous data, or data trends are the linchpin of the SLO because they provide the basis for the SLO growth targets. Before writing SLO growth targets, districts should analyze their assessment data from SLO courses. Data sources may include any of the following:

- Formative assessments based on the standards in the SLO
- Benchmark tests which focus on standards in the SLO
- Unit tests from course that assess standards in the SLO
- Grades from SLO course's performance based tasks
- Student transiency rate for school system (High? Low?)
- Pass/Fail Rate for SLO course for last two years
- Percentage of students receiving As, Bs, Cs, Ds, and Fs in course
- Attendance rate for school (All classes and SLO courses)
- Teacher surveys detailing student growth predictions
- Formal or informal tests or course assignments with pre and post results (growth data)
- Tutoring and remediation services provided for course
- Percentage of students in SLO course with IEPs, in gifted classes, etc.
- Acceleration methods for SLO course
- State-mandated standardized tests based on SLO's standards (EOCT, CRCT, GHSGT, etc)
- Perception survey data from stakeholders related to SLO course and any other data that links classroom practices to student achievement

Teacher's role with SLOs

After districts have developed SLOs and received GaDOE approval, the SLOs will be given to teachers who will administer the pre assessments. Pre and post assessments will be administered during the district determined administration windows. The Teacher SLO Implementation Plan is located on the TLE Electronic Platform and will be completed after the completion of the pre assessment(s). The purpose of this form is to identify instructional strategies and gather evidence to demonstrate progress towards SLO attainment. Progress monitoring should be an on-going process engaging both teachers and evaluators and should occur at regular intervals in various settings.

SLOs are written so that local school evaluators can successfully use the SLO Evaluation Rubric (See Figure 4) to determine if the teacher's students met the SLO. The rubric listed below is an example which may be utilized in this process. Data will be used to determine the final percentages associated with each level of performance.

Figure 4: Example of Student Learning Objective Evaluation Rubric
Rubric is not in final form.

Exemplary (3 points)	Proficient (2 points)	Needs Development (1point)	Ineffective (0 points)
The work of the teacher results in extraordinary student academic growth beyond expectations during the school year. Fifty percent (50%) or more students exceeded the Student Learning Objective, at least 40% met the Student Learning Objective, and no more than 10% did not meet the Student Learning Objective.	The work of the teacher results in acceptable, measurable, and appropriate student academic growth. Eighty percent (80%) or more students met or exceeded the Student Learning Objective and no more than 20% did not meet the Student Learning Objective.	The work of the teacher results in student growth that does not meet the established standard and/or is not achieved with all populations taught by the teacher. Fifty percent (50%) or more students met or exceeded the Student Learning Objective.	The work of the teacher does not result in acceptable student academic growth. Forty nine percent (49%) or less of students met or exceeded the Student Learning Objective.
Comments:			

Sample SLOs

While each SLO must have specific components, the SLO itself may vary. The samples provided below are meant to demonstrate the required components for the SLO. All SLOs may not match these samples, but these models demonstrate the basic structure. Each example demonstrates a different approach to measuring growth (individualized growth, uniform growth, and tiered targets). Targets for meeting and exceeding are also indicated. SLOs should also include the highest performers in the district population. This can be done by adding a "maintain" statement and including an additional task for advanced learners.

The following sample is used when growth targets are unique for each student depending on his pre assessment score. In Figure 5, growth is based on the formula which requires students to grow by increasing 60% of their potential growth.

Figure 5: Sample SLO with Individualized Growth

Sample SLO for High School American Government and Civics

From September 1-15, 2013 to May 1-15, 2014, 100% of American Government and Civics students will demonstrate growth from the pre assessment to the post assessment as measured by X County's locally developed measures as follows:

The minimum expectation for individual student growth is based on the formula which requires students to grow by increasing his/her score by 50% of his/her potential growth.

- Pre-assessment score + (100 – pre-assessment score) x .50 = Post-assessment Target Score.
- Students scoring 10 points or higher than their target would be considered exceeding their target.

  Example using 40 on a pre-assessment:

  40 + [(100 - 40) * .50]
  40 + [(60) * .50]
  40 + [30]

  70 is the target for the post-assessment
  A score of 80 denotes exceeding

The following sample is used when a uniform growth target is incorporated into the SLO. A uniform growth target means that the expectation is that all students will demonstrate equal growth as determined by the assessment. In Figure 6, all students are expected to increase by one or more levels from the pre assessment to the post assessment.

Figure 6: Sample SLO with Uniform Growth Target

Sample SLO for Grade 6 Intermediate Chorus

From August 1-15, 2013 to May 1-15, 2014, 100% of X County's grade 6 chorus students will demonstrate an increase of 1 or more levels from the pre to the post assessment as measured by the regionally developed four-level rubric for sight-singing composition and sight-singing performance.

The common performance based four-level rubric assessment titled "Sight Singing Assessment" was developed by representatives from the local RESA and its districts.

The following sample is used when a tiered target is incorporated into the SLO. A tiered target means that students will increase from their pre assessment score ranges to the post assessment score ranges. In Figure 7, all students are expected to increase by one or more tiers from the pre assessment to the post assessment. SLOs should also include the highest performers in the district population. This can be done by adding a "maintain" statement and including an additional task for advanced learners.

Appendix A: Student Learning Objectives Timeline

2013-2014 SLO Timeline	
May 2013	• Districts review the end of the year data and analyze the growth targets.
May - June 2013	• Districts begin work on SLOs and SLO assessments for 2013-2014 school year. • Each SLO submission must include an SLO form with statement, **growth targets**, a table of specification, and a criteria table referencing the pre/post assessments.

SLO Approval Window	**Monday, June 3, 2013 through Friday, August 2, 2013**
	• The approval process will begin as soon as SLOs are submitted to the GaDOE.
	• Districts must submit ALL SLOs together – not course by course.
	• All SLOs must be submitted during this window - including 2nd semester courses.
	• If necessary, districts may revise growth targets after the collection of pre-assessment data.
	    ○ SLOs utilizing the percentage of potential growth formula should not need to be re-submitted.
	    ○ SLOs utilizing pre-assessment data for setting growth targets with tiers may re-submit if growth targets require adjustments beginning on August 19 through September 13, 2013.

SLO Submission Process	If submission occurs before June 15, the process will be the same as last year • Email all attachments. • Specific guidance will be sent to districts prior to the opening of the submission window. • GaDOE staff will transfer information into the TLE Electronic Platform. If SLO submission occurs after June 15 • Complete fillable form on the Electronic Platform. • Use attachment icons embedded in the form to attach Table of Specifications and Criteria Table. • Specific guidance for SLO submission using the TLE Electronic Platform will be shared prior to June 15.
	GADOE Responsibilities • GaDOE audits and approves SLOs. • Districts will be notified concerning SLO approval no later than August 16, 2013. • If extensive modifications to the SLOs are needed, GADOE personnel will visit districts and provide on-site support for modifications. All revisions and approvals involving modifications will be completed by August 30, 2013. • If modifications to the SLO growth targets are needed based on pre-assessment data all revisions and approvals will be completed by September 27, 2013.

	District Responsibilities • As part of the TKES, evaluators conduct pre-evaluation conferences with teachers, either individually or in groups. These conferences will include a focus on student growth. • Teachers administer the district approved pre-assessments. • The date for the submission of pre-assessment data is being finalized and will be shared as soon as possible. • Districts determine the process of entering SLO data for submission. The GaDOE designated fields must be reflected in the district information: District ID and name, school ID and name, teacher certification ID, first and last name, course ID and number, section ID, GTID, student first and last name, pre-assessment scores, meets target, and exceeds target.
December 2013-January 2014	• Teachers complete mid-year or mid-course review for SLOs. This information is reviewed during mid-year or mid-course conference with evaluators. • Teachers who are responsible for semester courses will administer the post-assessments at the end of the semester. • The date for semester post data submission is being finalized and will be shared as soon as possible.
January 2014	• Teachers administer the district approved pre-assessments for second semester.
August – April 2014	• Teachers analyze data and implement teaching strategies and monitor student progress towards attainment of SLOs.
April – June 2014	• Teachers administer post-assessments. • The process for submission of post data is the same as pre data. Districts determine the process for entering student information for the submission of SLO data. The GADOE designated fields must be reflected in the district information: District ID and name, school ID and name, teacher certification ID, first and last name, course ID and number, section ID, GTID, student first and last name, pre-assessment scores, meets target, exceeds target and post assessment scores.
SLO Post Assessment Data Submission Window	• Thursday, April 15, 2014 through Tuesday, June 14, 2014
June 2014	• GADOE calculates TEM using all components of the TKES.

Appendix B: List of Courses with Assessment Supports

A summary of the tools and resources available from GaDOE
 (Yellow indicates courses represented in both the PDAs and item bank.)

2012-2013 Public Domain Assessments	2013-2014 Item Bank Development
Collaboratively developed assessments were developed for the following "Phase II" courses in the Spring of 2012. If desired, districts may choose to use any of these assessments in their entirety, or may choose items from the assessment to use for their own locally created assessments. All assessments and items should be reviewed carefully by districts to ensure they meet district expectations and needs.	A variety of items (questions, tasks, etc) were developed by teacher teams for the following courses. Districts may choose to use any of the items as they develop their own assessments to measure SLOs in their district. All items should be reviewed carefully by districts to ensure they meet district expectations and needs.
Elementary Reading and Math	**HS ELA**
PK.001.0000 Pre-K Literacy	23.0340000: Advanced Composition
PK.002.0000 Pre-K Numeracy	23.0520000: British Literature / Composition
23.0011: Reading / 23.0010000: Language Arts / Gr K	23.0620000: Tenth Grade Literature / Composition
23.0012: Reading / 23.0020000: Language Arts/- Gr 1	23.0630000: World Literature / Composition
23.0013: Reading / 23.0030000: Language Arts / Gr 2	**HS Science**
23.0014: Reading / 23.0040000: Language Arts / Gr 3	40.0510000: Chemistry I
27.0110000: Mathematics / Gr K	40.0810000: Physics I
27.0120000: Mathematics / Gr 1	26.0611000: Environmental Science
27.0130000: Mathematics / Gr 2	26.0730000: Human Anatomy/Physiology
27.0140000: Mathematics / Gr 3	40.0930000: Forensic Science
HS English	26.0610000: Ecology
23.0320000: Journalism I	
23.0330000: Journalism II	**HS Math**
23.0340000: Advanced Composition	27.0710000: Calculus
23.0520000: British Literature / Composition	27.0830000: Mathematics III - Advanced Algebra / Statistics
23.0620000: Tenth Grade Literature / Composition	27.0850000: Advanced Mathematical Decision Making
23.0630000: World Literature / Composition	27.0870000: Mathematics of Finance
HS Science	27.0840000: Mathematics IV - Pre-Calculus - Trigonometry/Statistics
26.0130000: Biology II (Grade 9-12)	**HS Social Studies**
26.0611000: Environmental Science	45.0150000: Psychology
26.0710000: Zoology	45.0570000: American Government / Civics
26.0730000: Human Anatomy / Physiology	45.0711000: World Geography
40.0510000: Chemistry I	45.0830000: World History
40.0520000: Chemistry II	**Foreign Language**
40.0640000: Earth Systems	60.0110000: French I
40.0810000: Physics I	60.0710000: Spanish I
40.0820000: Physics II	60.0720000: Spanish II
HS Math	60.0120000: French II
27.0624: GPS Pre-Calculus	60.0740000: Spanish IV
27.0710000: Calculus	61.0410000: Latin I
27.0830000: Mathematics III - Advanced Algebra / Statistics	61.0120000: German II
27.0840000: Mathematics IV - Pre-Calculus - Trigonometry/Statistics	62.0110000: Chinese I
HS Social Studies	**Physical Education**
45.0150000: Psychology	36.0010000: Physical Education / Grade K
45.0310000: Sociology	36.0020000: Physical Education / Grade 1
45.0570000: American Government / Civics	36.0030000: Physical Education / Grade 2
45.0711000: World Geography	36.0040000: Physical Education / Grade 3
45.0830000: World History	36.0050000: Physical Education / Grade 4
HS Foreign Language	36.0060000: Physical Education / Grade 5
60.0110000: French I	36.0080000: Physical Education / Grade 8
60.0710000: Spanish I	36.0540000: Weight Training
	36.0210000: Introductory Team Sports

	Music / Theatre
Note about Advanced Placement: The following AP courses were included as part of Phase II, however the associated Public Domain Assessments are no longer available. Districts are encouraged to utilize as needed the many other resources available to them from released AP exams. The AP courses that were included during Phase II: • AP Language and Composition • AP Literature and Composition • AP Calculus AB • AP Statistics • AP Psychology, • AP Gov/Pol: USA • AP Gov / Pol: Comparative • AP Macroeconomics • AP Microeconomics • AP World History • AP US History	53.0020000: Music, General / Grade 1
	53.0050000: Music, General / Grade 4
	53.0080000: Music, General / Grade 7
	53.0330000 Beginning Band /Grade 6
	53.0340000 Beginning Band/Grade 7
	53.0350000 Beginning Band/Grade 8
	53.0361000 Beginning Band (Grade 9-12)
	54.0130000 Beginning Chorus/Grade 6
	54.0140000 Beginning Chorus/Grade 7
	54.0150000 Beginning Chorus/Grade 8
	54.0211000 Beginning Chorus (Grade 9-12)
	53.0381000: Advanced Band I (Grades 9-12)
	54.0231000: Advanced Mixed Chorus I (Grades 9-12)
	53.0571000: Intermediate Orchestra I (Grades 9-12)
	52.0210000: Theatre Arts/Fundamentals I
	52.0120000: Theatre Arts (Grade 7)
	51.0120000: Proficient Dance (Grade 7)
	Art
	50.0020000: Visual Arts/Grade 1
	50.0050000: Visual Arts/Grade 4
	50.0120000: Visual Arts/Grade 7
	50.0211000: Visual Arts/Comprehensive I
	50.0411000: Visual Arts/Ceramics/Pottery I
	50.0313000: Visual Arts/Drawing & Painting I
	50.0711000: Visual Arts/Photography I
	CTAE
	47.53100 - Basic Maintenance and Light Repair
	20.52810 - Early Childhood Care Education I
	21.42500 - Foundations of Engineering and Technology
	43.43000 - Introduction to Law, Public Safety, Corrections and Security
	08.47400 : Marketing Principles
	25.52100 – Introduction to Healthcare Science
	07.44130 - Introduction to Business and Technology
	10.51810 - Audio-Video Technology Film I
	02.47100 - Basic Agriculture Science
	32.41400 - Coordinated Career Academic Education I
	20.41610 - Foods, Nutrition and Wellness
	46.54500 - Industry Fundamentals and Occupational Safety
	20.53100 - Introduction to Culinary Arts
	11.41500 - Introduction to Digital Technology
	07.08500 - Middle School Business and Computer Science

Appendix C: Teacher Assurances

As related to Teacher and Leader Keys Effectiveness Systems

Any action that compromises test/assessment security, leads to the invalidation of an assessment scores, or interferes with the components of the Teacher and Leader Keys Effectiveness System will be viewed by the Georgia Department of Education as inappropriate. In order to maintain the fidelity of TKES and LKES all teachers and administrators must adhere to the following assurances. This list is not exhaustive. Any concerns about test/assessment security or proper implementation of the TKES and LKES components must be reported to the district administration immediately.

Initials	Assurances
	Teachers have been trained in the appropriate use of all components of the Teacher and Leader Keys Effectiveness System.
	Students are prepared for the post assessment by the alignment of curriculum and instruction to the district content standards.
	Students are appropriately informed about the assessment prior to its administration, including its purposes, uses, consequences, and how the assessment information will be judged or scored.
	Students are encouraged to put forth optimal effort based on the purpose of the assessment. Results of pre assessments will be appropriately shared with students.
	An appropriate testing environment is provided.
	All eligible students are assessed.
	All reasonable and allowable accommodations for the administration of the assessment are provided to persons with disabilities or special needs.
	Appropriate security precautions are taken before, during, and after the administration of the assessment.
	Reasonable quality control procedures are maintained before, during, and after administration and scoring of the assessment.
	No part of the assessment is revealed to students prior to the administration and distribution of assessment occurs immediately prior to administration.
	The assessment occurs during the specified schedule of administration.
	The specified schedule of administration provides for make-up opportunities for students absent during the administration of the assessment.
	Teacher actions before, during, or after assessments should not give any particular student or class of students an unfair advantage over others.

	All standards within the course are taught with the appropriate level of time/emphasis. No course standards are taught to the exclusion of other standards for the sole purpose of SLO attainment.
	Pre and post assessment will be administered within the district-designated assessment windows. Assessments are scored and recorded in a timely manner as identified by district procedures.
	Student assessments and all scoring documents are maintained according to the district's records retention schedule.

It is a breach of proper assessment administration if anyone performs any of the following:

	Coaches examinees during testing, performance assessments, or alters or interferes with examinees' responses in any way.
	Gives examinees access to assessment questions or prompts prior to administration.
	Copies, reproduces, or uses in any manner inconsistent with test security regulations including all or any portion of test booklets, or assessments.
	Makes answers available to examinees outside the assessment window or assessment time.
	Reads or reviews test questions before, during or after testing (unless specified in the IEP, IAP or ELL/TPP).
	Fails to follow security regulations for distribution and return of secure test materials as directed, or fails to account for all secure test materials before, during and after testing. (NOTE: Lost test booklets constitute a breach of test security and will be reported using district designated procedures.
	Uses or handles secure assessments, prompts, and/or answer documents for any purpose other than examination.
	Fails to follow administration directions for the assessment.
	Erases, marks answers, or alters responses on an answer document or interferes with student as they respond to computerized questions, etc.
	Participates in, directs, assists, counsels, encourages or fails to report any of the above listed acts.

Failure to safeguard assessment materials or to comply with proper administration procedures could adversely affect an individual's certification status.

_____
Teacher Name

_____   _____
Teacher Signature   Date

Appendix D: SLO District and Teacher SLO Implementation Template

This form provides teachers and leaders with an overview of the district-developed Student Learning Objective for every SLO course in a school system. Please see the GaDOE SLO Operations Manual for more guidance and information about the process aligned with the completion of this form.

General Information

District Name	State Funded Course Number	State Funded Course Title	Grade(s)

Collaboratively Developed
List SLO Development & Assessment team members and roles:

Pre-Assessment Window	Post-Assessment Window

SLO Statement

	Selected Standards	
1	**Selected Standards** *Determine which standards are worthy of the students' and teachers' focus for the given instructional period (typically a school year or semester). List the standards and reference number.*	
2	**Description of Assessment** *A brief description of the pre and post SLO measures should be provided here. It should specifically include sources used in the assessment development. These could consist of commercially developed or locally/regionally developed*	*Please check one:* ☐ Commercially Developed ☐ Locally/Regional Developed
3	**District Baseline Data or Historical Data/Trends** *Baseline data, previous data, or data trends are the linchpin of the SLO since they provide the basis for the SLO growth targets and tiers. Provide a description of the data used here.*	

Teacher SLO Implementation Plan

4	**Classroom Baseline Data** *Briefly describe data analysis completed after results of pre-assessment. Also consider student achievement information, data analysis from other sources or observational data.*			
		Instructional Strategies	Evidence/Artifacts	Monitoring Dates
5	**Strategies For Attaining SLOs** *Briefly identify instructional strategies, artifacts and evidence to be collected and timelines for monitoring student growth*			

Appendix E: Content Alignment Form

<table>
<tr><td colspan="6" align="center">**Content Alignment**</td></tr>
<tr><td colspan="6">The first step involved in developing valid assessment items, or measures that assesses the intended learning outcomes, is determining and analyzing the content to be assessed, the level of cognitive complexity of the content, and the appropriate format for assessing the content. The **Content Alignment** process is completed before the assessment is developed as a tool for teams to review, think deeply about and break down the content of the course. Working through this form will prepare teams for the task of developing a high quality assessment and increases the reliability of the measure.</td></tr>
<tr><td colspan="6">** Hover mouse over column title for more information.*</td></tr>
<tr>
<td rowspan="2">**Standards to be Addressed**</td>
<td rowspan="2">**Content Emphasis**</td>
<td colspan="2">**Analyzing the Standards**
What to teach / assess</td>
<td rowspan="2">**Level of Cognitive Demand (DOK)**

DOK Resources</td>
<td rowspan="2">**Appropriate Item Types**</td>
</tr>
<tr>
<td>**Content**
What will students know and be able to understand (concepts and understanding)?</td>
<td>**Behaviors**
What should students be able to do (key skills)?</td>
</tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Appendix F: Table of Specifications – By Item

Assessment Table of Specifications - (Analyzed by Item)

Using the **Table of Specifications** to build an assessment is the second step of the assessment development process. The purpose of this table is to detail the content, level of cognitive demand, amount, type, and answer or point value of the measurement items/or tasks. Typically, this is used while also building the assessment. The post-administration analysis should be revisited after completion of the assessment to review and reflect on the results.

Please Note: There are two (2) versions of the ToS available for use: One is organized sequentially by item, and one holistically by standard. Districts should choose the option that best fit their needs.

Subject:	Third Grade Reading	Course Number:	23.0014	Grade:	Third (3)	Total Items/Tasks:	35
Assessment Title:	{District Name} 3rd Grade Reading Post-Assessment	TOS Date:	2/3/13	District:	{District Name}	*Please check one or both below.*	
						Pre	**Post**
							x

SLO Measure Development – Complete during SLO Development						Post Administration Analysis –Recommended after post assessment results		
Hover mouse over column title for more information.								
Item	**Domain or Strand Standard/Element**	**Content Emphasis**	**Item Type or Task**	**Standard: Cognitive Demand (DOK)**	**Item: Cognitive Demand (DOK)**	**# or % Incorrect**	**# or % correct**	**Analysis/Next Steps**
1	Reading (Informational) ELACC3RI1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	9% or medium emphasis	MC	DOK: Level 1	DOK: Level 1	30%	70%	Most students answering incorrectly selected item C. These students did not read the key detail statement in its entirety. For remediation/or reinforcement, model active reading strategies using highlighting and/or marginal notes to determine main idea of paragraphs/indicate key supporting details emphasizing the importance of applying these strategies to help answer questions correctly.
2	Reading (Informational) ELACC3RI2: Determine the main idea of a text; recount the key details and explain how they support the main idea. ELACC3RL3: Describe characters in a story and explain how their actions contribute to the sequence of events ELACC3RL5: Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.	18% or medium emphasis	SR	DOK: Level 3	DOK Level 3	70%	30%	Student responses indicated that students have difficulty discerning extraneous details from relevant details. Remediation/or reinforcement activities might include using real-world examples and practice distinguishing between extraneous & relevant details in media or playing games, such as Detective Details will enhance student understanding/ performance.

Georgia Department of Education
SLO Operations Manual
Appendix G: Table of Specifications – by Standard

Assessment Table of Specifications - (Analyzed by Standard)

Using the **Table of Specifications** to build an assessment is the second step of the assessment development process. The purpose of this table is to detail the content, level of cognitive demand, amount, type, and answer or point value of the measure items/or tasks. Typically, this is used while also building your assessment. The post-administration analysis should be revisited after completion of the assessment to review and reflect on the results.

Please Note: There are two (2) versions of the ToS available for use: One is organized sequentially by item, and one holistically by standard. Districts should choose the option that best fit their needs.

Subject:	Third Grade Reading	Course Number:	23.0014	Grade:	Third (3)	Total Items/Tasks:	35	
Assessment Title:	{District Name} 3rd Grade Reading Post-Assessment	TOS Date:	2/3/13	District:	{District Name}	*Please check one or both below.*		
						Pre	**Post**	
							x	

SLO Measure Development – Complete during SLO development						Post Administration Analysis – Recommended after post assessment results					

* Hover mouse over column title for more information.

Domain or Strand Standard/Element	Standard Analysis Content	Standard Analysis - Behaviors	Content Emphasis Course/Test	Correlating Items or Tasks	Standard: Cognitive Demand	Item: Cognitive Demand	Balanced?		# or % Incorrect	# or % correct	Analysis/Next Steps
Reading (Informational) ELACC3RI1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	Understanding of a text	Ask and answer questions Refer to text as basis for answers	3 weeks or medium emphasis or 9%	**MC** #'s 1,4,6,10 **SR** **ER** **PT**	DOK: Level 1	DOK Level I 1,4,6,10 DOK Level 2 DOK Level 3 DOK Level 4	Yes		30%	70%	Most students answering incorrectly selected item C. These students did not read the key detail statement in its entirety. For remediation/or reinforcement, model active reading strategies using highlighting and/or marginal notes to determine main idea of paragraphs/indicate key supporting details emphasizing the importance of applying these strategies to help answer questions correctly.
Reading (Informational) ELACC3RI2: Determine the main idea of a text; recount the key details and explain how they support the main idea	Main idea, key details of a text	Determine the main idea Recount key details Explain how details support main idea	6 weeks or medium emphasis or 18%	**MC** #'s 2,5,7,9 **SR** **ER** #'s 8,6,12 **PT**	DOK: Level 3	DOK Level I DOK Level 2 2,5,7,9 DOK Level 3 8,6,12	Yes		70%	30%	Student responses indicated that students have difficulty discerning extraneous details from relevant details. Remediation/or reinforcement activities might include using real-world examples and practice distinguishing between extraneous & relevant details in media or playing games, such as Detective Details will enhance student understanding/ performance.

Appendix H: Criteria Table

Assessment Criteria Table -- for the Development & Evaluation of Quality Assessments

The final step of the assessment development process is to conduct a thorough review and evaluation of the assessment created. The **Assessment Criteria Table** is a tool designed to guide districts through the process of reviewing the assessment items, formatting, administration, and results.

Subject:		Course Number:		Grade:		*Please check one or both below.*	
Assessment Title:		Date of Review:		District:		**Pre**	**Post**
	Excellent	**Satisfactory**	**Some revisions may be necessary**	**Significant revisions should be considered**	**Not Applicable**
Item Construction					
Select-Response Items (Multiple Choice) 1. Question stem is clear. 2. Item is stated in the positive. (For example, refrain from using items, such as "Which of the following is NOT a purpose for the passage?") 3. Item does not give away correct answer. 4. Emphasize qualifiers (e.g., most likely, best) and avoid using "all" or "none of the above." 5. Answer choices are plausible. 6. Answer choices are parallel in length (e.g., words, phrases, sentences). 7. Answer choices are parallel in grammar, semantics, and syntax. 8. Answer choices are in a logical order. 9. Avoid clues in the answer choices. 10. Ensure correct response is the only correct response.	☐ Assessment meets at least 9 of the select-response item criteria.	☐ Assessment meets at least 8 of the select-response item criteria.	☐ Assessment meets at least 6 of the select-response item criteria.	☐ Assessment meets less than 6 of the select-response item criteria.	☐
Supply-Response Items **(Short Answer, Extended Response, etc.)** 1. Question stem is clear. 2. Scoring rubric is included. 3. Adequate space for response is provided.	☐ Question(s) or prompt(s) are written to utilize higher order thinking at DOK Levels 3-4 and elicit a unique response.	☐ Question(s) or prompt(s) are written to elicit the appropriate response.	☐ Question(s) or prompt(s) are too broad or too narrow to elicit the intended response.	☐ Question(s) or prompt(s) are unclear and invite a wide range of responses.	☐

	Excellent	Satisfactory	Some revisions may be necessary	Significant revisions should beconsidered	Not Applicable
II. Assessment Validity & Reliability					
Validity • The assessment questions sufficiently represent the skills in the subject area and adequately assess the skills in the specified standard. • Does this assessment measure what it is intended to measure? • Does the assessment adequately sample the intended learning outcomes? • Does the assessment have a sufficient number of items or performance tasks to target each standard to be assessed? • Do the items assess multiple standards where possible? • Can logical inferences be made about students' knowledge and/or skills in the course from the assessment?	☐ The assessment adequately samples the intended standards or objectives. There is a balanced representation of the content standards/cognitive levels, with most of the assessment items at or above the standards' respective DOK levels and objectives.	☐ The assessment samples the majority of the intended standards or objectives. There is a balanced representation of the content standards/ cognitive levels, with at least half the assessment items at or above the standards' respective DOK levels and objectives.	☐ The assessment inadequately samples the intended standards or objectives. There is an unbalanced representation of the content standards/ cognitive levels; some of the assessment items at or above the standards' respective DOK levels and objectives, but many are not.	☐ The assessment does not sample the intended standards or objectives. There is not a balanced representation of the content standards/ cognitive levels. Most of the assessment items fall below the standards' respective DOK levels and objectives.	☐
Reliability • Are there enough questions for each standard assessed, based on the indicated content emphasis? • Is the assessment length appropriate? • Does the assessment length reduce measurement error and support reliability? • Does the assessment provide for student-specific factors (e.g., fatigue, guessing), assessment-specific factors (e.g., ambiguous items), scoring-specific factors (e.g., computation errors)? • Are the questions, directions, and formatting on the assessment free from systematic error? • Are the grading criteria specific and support inter-rater reliability	☐ An adequate number of items are included, the assessment is free from systematic error, **and** the grading criteria are specific and support inter-rater reliability.	☐ An adequate number of items are included, and the assessment is free from systematic error **or** the grading criteria are specific and support inter-rater reliability.	☐ An adequate number of items are included, **but** the assessment is subject to systematic error and/or the grading criteria are not specific and do not support inter-rater reliability.	☐ There are an inadequate number of items, the assessment is subject to systematic error, **and** the grading criteria are not specific and do not support inter-rater reliability.	

	Excellent	Satisfactory	Some revisions may be necessary	Significant revisions should beconsidered	Not applicable
III. Assessment Administration Procedures					
Assessment Administration Plan The plan provides detailed, clear instructions that outline appropriate assessment administration procedures: 1. Specifications for proper identification and training of assessment coordinators and proctors. 2. Clearly communicated assessment administration procedures for building leaders and teachers. 3. Clearly outlined time length and assessment accommodations. 4. Provisions for teacher directions and script (when needed). 5. Adequate access to the appropriate assessment materials and assessment tools for all assessment participants. 6. Clearly communicated assessment scoring procedures. 7. Provisions for inter-rater reliability training (where appropriate).	☐ Clear guidelines for assessment security are provided. Assessment administration guidelines meet 7 out of the 7 assessment administration criteria.	☐ Guidelines must meet 7 out of 7 assessment administration criteria.	☐ Guidelines must meet 7 out of 7 assessment administration criteria.	☐ Guidelines must meet 7 out of 7 assessment administration criteria.	☐
IV. Assessment Reporting					
Detailed and clear assessment reporting procedures are provided. 1. The proficiency criteria for the SLO are clearly communicated. 2. The time between assessment administration, scoring, and reporting of results is timely. 3. The district's data reporting method is clear and consistent with classroom data reports. 4. The data reporting format provides for aggregate data (district, school, class) and individual student data. 5. A protocol is established to provide feedback to students, teachers, administrators, and parents.	☐ Assessment reporting guidelines meet 5 of the 5 assessment reporting criteria.	☐ Assessment reporting guidelines meet 4 of the 5 assessment reporting criteria.	☐ Assessment reporting guidelines meet 3 of the 5 assessment reporting criteria.	☐ Assessment reporting guidelines meet two or less of the assessment reporting criteria.	☐

	Excellent	Satisfactory	Some revisions may be necessary	Significant revisions should be considered	Not applicable
V. Post-Administration (Assessment Reliability)					
Item Analysis Item analysis was conducted to improve the effectiveness of assessment items and the validity of assessment scores. Items were critiqued to determine revision or removal from assessment.	☐ Item analysis was conducted and items were critiqued resulting in the revision or removal of assessment items.	☐ Item analysis was conducted and items were critiqued for future assessment construction.	☐ Item analysis was conducted.	☐ Item analysis was not conducted.	☐
Reliability of Results The results of the assessment are consistent and dependable. • Did each item distinguish between those who have learned the standard/or objective and those who have not? • Are assessment scores free of errors of measurement due to things like student fatigue, item sampling, lack of student engagement, and student guessing? • Do the results reflect the intended learning outcomes?	☐ The assessment contained 6 or more items or 1 or more tasks to assess each domain or standard. The items/tasks were free from bias. The items were free from ambiguity. The items were free from grammatical or mechanical mistakes.	☐ The assessment contained 6 or more items or 1 or more tasks for most domains or standards. The items/tasks were free from bias. The items were free from ambiguity. The items were free from grammatical or mechanical mistakes.	☐ The assessment contained 6 or more items or 1 or more tasks for some domains or standards. The items/tasks were biased, ambiguous, or included grammatical or mechanical mistakes.	☐ The assessment contained less than 6 items or no task for each domain or standard. There was evidence of bias and ambiguity. The assessment contained several grammatical or mechanical mistakes.	☐
Data Use • Items are diagnostic and/or conclusive in nature, providing information regarding misunderstanding and misconceptions in learning and/or demonstration of intended learning outcomes based on student responses. • The information can be used to determine student learning of the standard and to prescribe appropriate remediation and inform future assessment construction.	☐ Item analysis and/or standard analysis data were used to determine student learning trends, inform instruction, **and** assessment development.	☐ Item analysis and/or standard analysis data were used to determine student learning trends and inform instruction **but** were not used to inform assessment development.	☐ Item analysis and/or standard analysis data were used to determine student learning trends.	☐ Item analysis and/or standard analysis were not conducted.	☐

Appendix I: SLO Approval Rubric

SLO Approval Rubric

Districts may use these guidelines when reviewing SLOs prior to submission for DOE approval. The rubric outlines key features that should be considered in SLO development.

	Stage 3	Stage 2	Stage 1
	Exemplary SLO Integrity of SLO Process is Increased (Stage 3 also include criteria for Stage 2)	**Proficient SLO** All Requirements Met	**Developing SLO** Needs Revisions
General Information		☐ All general information is complete and accurate – **growth target is included**	☐ Any component of the general information is incomplete or inaccurate
Standards	☐ Selected standards are appropriate for teacher/student focus for the instructional period ☐ Selected standards are an important and overarching concept and approved by GaDOE-trained assessment team	☐ Focused on content standards ☐ Standards are selected by collaborative team ☐ Teachers and content experts were involved in the SLO development ☐ Brief description of standard(s) provided	☐ Too few standards are selected to adequately assess student knowledge ☐ In order for the large number of standards chosen to be assessed, the pre and post assessment would be too lengthy. ☐ No brief description of the standard/s provided
Description of Assessment	☐ Alignment between standards and assessment has been approved by district assessment team using the Table of Specifications and Criteria Table ☐ Utilizes externally developed, reliable and valid purchased assessments **Or** ☐ Locally developed assessments have been approved by district assessment team using the Table of Specifications and Criteria Table ☐ Paper/pencil or performance based assessments are used as appropriate for the characteristics or standards of the non-tested subject	☐ Assessment is aligned with the standards ☐ It appears that an appropriate instrument/measure is selected to assess SLO ☐ Assessment is described or referenced (for procured assessments) **Or** ☐ Table of Specifications and Criteria Table have been accurately completed for locally/regionally developed assessments.	☐ Assessment is not aligned with standards ☐ Purchased assessments are not described ☐ Table of Specifications and Criteria Table were not utilized in designing or evaluating locally/regionally developed assessment(s) ☐ Table of Specifications and Criteria Table does not accurately reflect assessment items/tasks
District Baseline Data or Historical Data / Trends	☐ Is based on specific, related district baseline or trend data and supports growth targets	☐ General baseline and/or trend data are provided **Or** ☐ Convincing rationale is provided	☐ No baseline data or rationale are provided to support the standard/s chosen
SLO	☐ SLO is clear and coherent on first read	☐ SLO is clear and coherent	☐ SLO is not clear and coherent
Statement *Beginning August 19 through September 13, districts may re-submit growth targets if adjustments are required after pre-assessment data is reviewed.*	☐ Results of pre-assessments can be used to drive instruction and not for the sole purpose of SLO data ☐ Attainment of SLOs reinforces school and district student achievement goals ☐ Expected growth is rigorous, yet attainable during instructional period. Rigorous DOK items/tasks are noted in ToS ☐ SLO was developed by content experts and practitioners	☐ Uses SMART criteria ☐ SLO appears to be feasible for teacher ☐ Teachers are able to align work directly to the district SLO ☐ Growth targets appear realistic and meet the needs of all students ☐ SLO is within teachers' control to effect change and appears to be a worthwhile focus for the instructional period ☐ Growth targets appear to be rigorous	☐ Does not completely follow SMART criteria ☐ Attainment of SLO is outside teachers' influence ☐ Growth targets do not appear to be realistic ☐ Growth targets do not address the needs of all students ☐ Growth targets do not appear to be rigorous ☐ Growth targets not supported by baseline data

Appendix J: Glossary

Analyzing Standards: This analysis involves the process of identifying the content and behaviors of the standards to determine what students will know and be able to do when they have mastered the standard.

Assessment: The instrument used to measure student learning of the objectives chosen. Assessment involves evaluation, testing, grading, and measurement.

Assessment Team: A team of educators formed to construct SLOs and develop and evaluate quality aligned assessments.

Baseline Data: Basic student performance information gathered before learning goals are established, an assessment is created, or a program begins. It provides a measurement used as a basis of comparison for assessing student learning progress, the appropriateness of the assessment as a measure, or program impact.

Bias: A particular tendency or inclination, especially one that prevents unprejudiced consideration of a question; to show prejudice for or against unfairly

Categorical Concurrence: An alignment criterion that refers to the consistency of categories of content in the standards and assessments. The criterion of categorical concurrence between standards and assessment is met if the same or consistent categories of content appear in both the assessment and the standards. Research indicates that an assessment should include six items or more items, or at least one performance task, per domain or standard (where domains do not apply).

Ceiling Effect: The level at which variance in a variable is no longer measured or estimated. The Student Growth Model (SGM) does not have a ceiling effect, meaning students of all achievement levels, including the highest-achieving students, can demonstrate all levels of growth.

Cognitive Demand: This involves the depth of knowledge at which students interact with the content. The cognitive demand required by a standard or an assessment item is related to the number and strength of connections of concepts and procedures that a student needs to make to produce a response, including the level of reasoning required along with self-monitoring. Additional factors that influence cognitive demand include contextual requirements, language, the number and variety of representations, requirements for generalizations to new situations, and the opportunity to learn.

Content Validity: The degree to which an assessment adequately samples the intended learning outcomes, standards, or objectives of an instructional unit. In other words, content validity involves the degree to which the test matches the objectives of a content domain or standard.

Construct Validity: The degree to which an assessment accurately aligns with the theoretical framework of the intended learning outcomes, standards, or objectives of the instructional unit. Construct validity essentially addresses the question of whether or not an assessment is a good measure of students' ability and/or knowledge of the content.

Criteria Table: A table that specifies a set of criteria test developers can use to evaluate the quality of an SLO assessment.

Depth of Knowledge (DOK): An element of the Webb Alignment Tool developed by Dr. Norman Webb, from the University of Wisconsin, to align standards with assessments. DOK focuses on the content standard in order to successfully complete an assessment/standard task. DOK focuses on the complexity of the task rather than the difficulty because it is descriptive in nature. Depth of Knowledge is represented by four levels of cognitive complexity: Recall, Skill/Concept, Strategic Thinking, and Extended Thinking. Each level describes the kind of thinking involved at that level

Distractor: A distractor looks like a correct answer to those who lack appropriate knowledge. Distractors should be comparable in length, complexity, and grammatical form to avoid common forms of bias cueing that would adversely affect reliability

Domain: Category which describes the major areas of expectation for student performance or teacher performance. The student performance in the content areas is identified by domain

Emphasis: Special stress or importance placed upon any topic, standard, or item. With regards to standards and assessment items/or tasks, emphasis is indicative of the amount of instructional time devoted to teaching the standard, or the weight of the standard in the course and on the assessment.

EOCT: End-of-Course Tests administered for State Board approved high school courses.

Formative Assessment: Assessment for learning. It is used to improve instruction and learning experiences still underway and to monitor student progress. Formative assessment includes informal techniques (e.g., student discussions, questioning, daily work, and observations) and formal techniques (e.g., quizzes, performance assessments, and portfolio assessments). Many formative assessments are not graded but are used as methods of providing feedback to help students improve prior to the summative evaluation.

GaDOE: Georgia Department of Education

Growth Target: A learning progression goal that specifies the degree of progress students are expected to demonstrate over the course of the instructional period.

Instructional Period: The length of the course during which the SLO will be implemented, monitored, assessed by teachers and attained by students.

Inter-rater Reliability: The consistency with which two or more scorers apply the rating or grading criteria of an assessment thereby resulting in stable assessment results among students

Item: Questions, problems, exercises, or other units of a test that elicit responses which can be scored separately and related to the skills the test is measuring as a whole. Select Response (e.g., multiple choice, fill in the blank) and Supply Response (e.g., constructed response, essay tasks) are the most common item types.

Item Analysis: The process which examines student responses to individual test items (questions) in order to assess the quality of those items and of the test as a whole. In addition, item analysis is valuable for increasing instructors' skills in test construction, identifying specific areas of course content which need greater emphasis or clarity, and informing instructional decisions regarding student learning needs.

LDS: A longitudinal data system designed to track student information (e.g., demographic and performance data) over multiple years in multiple schools.

Measurement: In terms of assessment, measurement is the process by which learning attributes or attainment is determined. Generally, a standard instrument is used to make the determination wherein values (e.g., scales, standard scores, rubric ratings) are assigned according to a specific set of rules (standard of proficiency, rubric).

Non-Tested Subjects: Subjects that do not have state standardized tests and, thereby, require an SLO and SLO assessment. At the elementary level, this includes grades Pre-Kindergarten through third grade and specialized courses (e.g., music, art, PE); at the middle school level, it includes all courses that do not have CRCTs; at the high school level, it involves all courses that do not have EOCTs.

Outlier: An observation that appears to deviate markedly from other observations in the sample. When summarizing data, an outlier has a smaller impact on a median than it does a mean.

Percentile: An indication of a student's standing in comparison with all students in the norm group. Percentiles range from a low of 1 to a high of 99. The percentile describes the percentage of students who fall below that value.

Performance Task: A method of assessment that is goal-directed requiring the student to create answers or products which demonstrate his/her knowledge or skills. A clear, logical set of performance-based activities that students are expected to follow should be evident and a clearly presented set of criteria should be available to help judge the degree of proficiency in a student response.

Performance Standards: Expectations of student performance in the content area or teacher performance relative to teaching duties and responsibilities.

Plausible: Plausible distractors should have an appearance of truth or reason, seemingly worthy of approval or acceptance, credibility believability.

Positive: Something that is explicitly stated, stipulated, or expressed. With regards to assessment, it involves constructing item stems that are positively stated rather than negatively stated to avoid poor item construction. An example of the difference between the two is *Which of these best describes ...*, as opposed to *Which of these does not describe ....*

Proficiency: The expected level to which students or teachers are expected to perform.

Protocol: A system of formats, rules, or procedures for implementation or administration of a program or plan.

Reliability: The extent to which measurement yields consistency or dependability of the results of an assessment.

Scoring Rubric: A scoring measure that acceptable responses and identifies the content and level of cognitive demand that is to be assessed so that students and teachers can draw valid inferences about student learning.

Select-Response Items: Items that have predetermined responses which the student must choose (e.g., matching, and multiple choice).

Student Learning Objectives (SLO): A statement of expected growth by students from pre to post within a given course and timeline.

SMART Criteria: The acronym SMART summarizes a structure to self-assess an objective's feasibility and worth**.** It stands for *Specific, Measurable, Appropriate, Realistic,* and *Time-bound.*

Standard: Learning outcome

Stimulus Materials: Information provided that students must use to answer a question or respond to an item (e.g., diagrams, charts, maps, pictures, excerpts from documents).

Summative Assessment: Assessment of learning that is used to determine level of proficiency related to course outcomes or state standards and the effectiveness of instruction. Ultimately, summative assessments are used to inform stakeholders of how well teachers and students have performed. They are usually administered at the end of a unit of study, benchmark period, quarter, course, or academic year.

Supply-Response Items: Assessment items for which the student must provide the answer (e.g., completion, constructed responses, essay items).

S**ystematic Error**: An error that is introduced by an inaccuracy inherent in the assessment itself, the assessment procedures, or the assessment administration. Examples of systematic error may include poor assessment layout, unclear directions, culturally biased language, insufficient number of items, or subjective scoring, among others.

Teacher of Record: The teacher of record is an individual (or individuals in the case of co-teaching assignments) who have been assigned responsibility for a student's learning in a subject/course. Students can have more than one teacher of record in a specific subject/course. For the purpose of SLOs, the teacher of record is not necessarily the teacher who assigns the course grade. Refer to *Teacher Keys Effectiveness System Implementation Handbook* for a more detailed list.

Tested Subjects: Tested subjects are courses with state standardized tests (e.g., CRCT, EOCT).

TKES: Teacher Keys Effectiveness System is Georgia's common evaluation system that will allow the state to ensure consistency and comparability across districts, based on a common definition of teacher effectiveness. TKES is comprised of three components: TAPS, Student Growth and Academic Achievement, and Surveys of Instructional Practice.

TEM: Teacher Effectiveness Measure is the final score from the Teacher Keys Effectiveness System. It is a weighted measure yielded from the following measures: TAPS score, Student Growth and Academic Achievement score, and the Student Survey of Instructional Practice.

Appendix K: Resources

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