Dr. John D. Barge, State School Superintendent

"Making Education Work for All Georgians"

Student Learning Objectives Operations Manual

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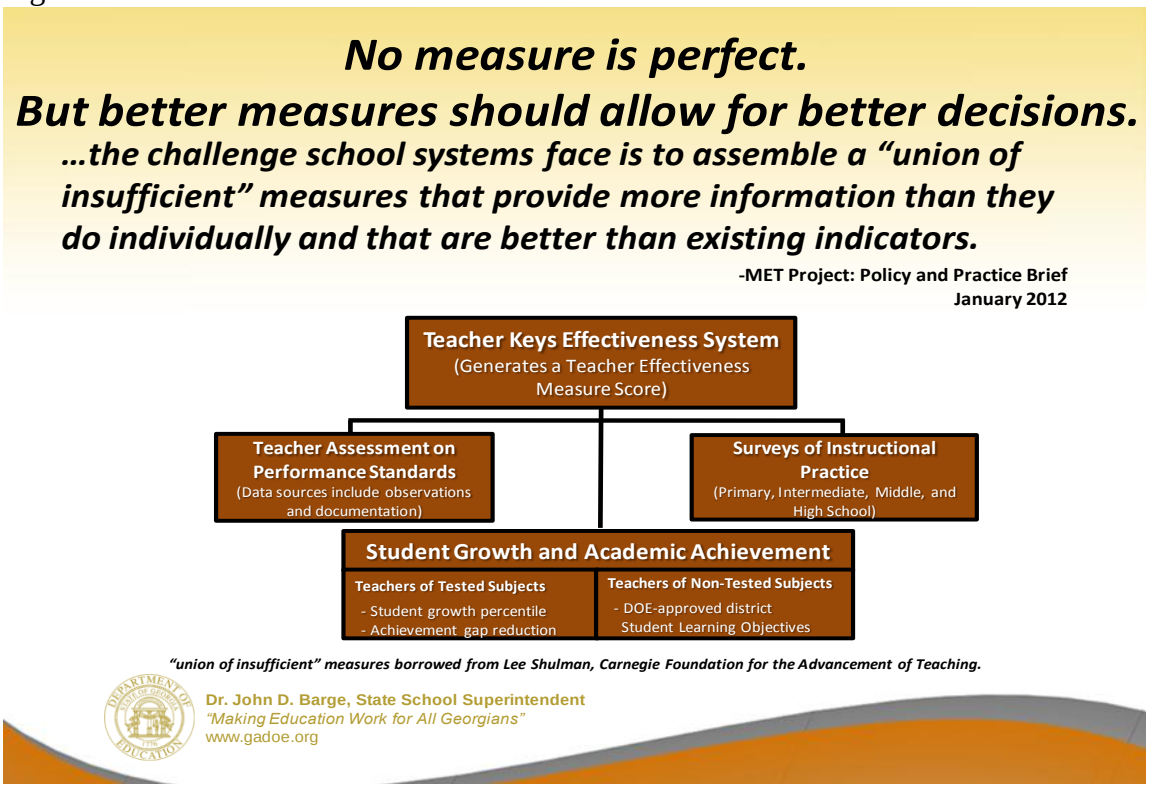
Introduction

In an effort to ensure that all schools and classrooms have great leaders and great teachers, Georgia, as part of the Race to the Top (RT3) plan has established the Teacher Keys Effectiveness System (TKES) and the Leader Keys Effectiveness System (LKES). As shown in Figure I, the TKES Evaluation 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. Georgia's focus on a multi-dimensional approach to teacher and leader evaluation will provide educators with high-quality and actionable feedback on their work with students, which will help them improve their effectiveness with students throughout their careers.

The focus of this manual is the Student Learning Objectives (SLOs) which comprise the Student Growth and Academic Achievement component of the teacher Keys Evaluations System for teachers of non-tested subjects.

Figure 1



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Student Growth and Academic Achievement

Classrooms are complex places, and measuring student learning can be challenging due to unique grade level and subject characteristics. However, student learning is the ultimate measure of the success of a teacher and an instructional leader. The goal is to examine student growth and academic achievement by using components which will guide teachers as they design their instruction and determine student growth targets.

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 (SLOs) utilizing district-identified achievement growth measures. Districts have the option to develop SLOs for tested subjects, however this is not required.

The focus of this manual is the implementation of the SLOs development process. The professional practice of setting growth objectives to measure student growth is the cornerstone of the state's emphasis on using assessment results to guide instruction. Research has found that educators who set high quality objectives often realize greater improvement in student performance. Establishing this systematic approach will require unprecedented collaboration between state leaders, district leaders, and local school staffs. Under the leadership and participation of district leaders, content and assessment experts, along with effective classroom teachers, work together to determine one SLO for each course. Each district SLO is submitted to the GaDOE for review and approval.

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Results from the 2011-2012 Pilot

Phase I: The training and preliminary work on SLOs began in October 2011. Over 37 training sessions, which included approximately 500 educators, were conducted. Each RT3 district chose 10 subjects for which to create an SLO. Phase I was designed for each district to learn the SLO development process and to write SLOs using current district assessments.

Two hundred five SLOs were submitted to the GaDOE for approval by December 2, 2011. A total of 306* SLOs were submitted during the month of December. Figure 2 describes the subjects for which the 234 reviewed SLOs were written:

Figure 2

Subject	ES	MS	HS
Reading/ELA	56		7
Math	37	3	8
Fine Arts	5	13	8
Physical Fitness	13	20	10
Social Studies		5	7
Science	8		12
Other	1	1	22
Total	**120**	**42**	**72**

- 120 or 51% were ES (78% of these SLOs were Reading/LA or Math)
- 42 or 18% were MS (48% were PE SLOs and the remaining SLOs were exploratory classes)
- 72 or 30% were HS (69% were non-EOCT academic class SLOs, 18% were CTAE-related, and 14% PE)

*As of 12.22.11, not all late submitted SLOs had been through the final review.

All Phase I SLOs are posted on the RT3 SharePoint site. SLOs are filed by state course number and by district. Well designed SLOs are noted and filed as exemplars on the SharePoint site. The RT3 SharePoint site is accessible only to districts who are piloting or implementing the Teacher Effectiveness System.

Phase II: The second phase of SLO submissions included 53 additional subjects which districts should develop and submit by July 2, 2012. The 53 additional subjects include pre-K and K-3 mathematics and reading/language arts and 32 high school courses. The most frequently taken courses for graduation were selected since those courses would impact the greatest number of teachers of non-tested subjects.

It was clear from Phase I that districts faced significant challenges in developing SLOs for courses for which the districts did not have valid and reliable assessments. The RT3 SLO contacts met in January 2012 and again in February 2012 to consider a collaborative SLO development process which included collaborative development of valid and reliable assessments. It was determined that each of the 26 RT3 districts would take the lead with two or three of the 53 Phase II SLOs and would develop the SLO as well as a pre and post-assessment for the SLO. The GaDOE staff would train local educators on the qualities of effective assessments during a three-day training and initiate the assessment development process.

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Several districts committed to collaborating with other districts on certain subject SLOs and committed to involving higher education experts. The resulting SLOs and assessments, called Georgia Public Domain SLOs, are posted on SharePoint for all districts to consider.

Twenty-five of these districts will participate in the GaDOE three-day assessment training and will complete SLO development locally. All RT3 districts will be required to create their own SLOs and assessments for Phase II SLOs or adapt or adopt the public domain SLOs.

Phase III: The third phase of the SLO development process will be determined once the progress and data from Phase I and Phase II are ascertained.

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Student Learning Objective Overview

What is a Student Learning Objective (SLO)?

District determined SLOs are content-specific, grade level learning objectives that are measureable, focused on growth in student learning, and aligned to curriculum standards. As a measure of teachers' impact on student learning, SLOs give educators, school systems, and state leaders an additional means by which to understand, value, and recognize 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. The process of setting and using SLOs requires teachers to use assessments to measure student growth. This allows teachers to plan for student success by ensuring that every minute of instruction is moving students, teachers, and schools toward the common vision of exemplary instruction and high levels of student academic growth.

Teacher Effectiveness Measure (TEM) Requirements

1. Eventually SLOs will be written for all non-tested subject areas Pre-K through grade 12. This includes:
    a. All subjects in Pre-K through grade 2 (e.g. Language arts/reading, mathematics, science, social studies, fine arts, etc.) are 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. Teachers will be evaluated by one district SLO for each non-tested subject/course that they teach. 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. As teachers work with the district-designated SLOs, they should maintain a spreadsheet of each student's pre-assessment score and post-assessment score, as well as any other data needed to ascertain attainment of the SLO. Student data, classroom data, and school data will be submitted to the GaDOE, via an electronic method.
6. Districts will submit SLOs on the District SLO Form for GaDOE approval no later than July 2, 2012. A separate form should be used for each SLO.

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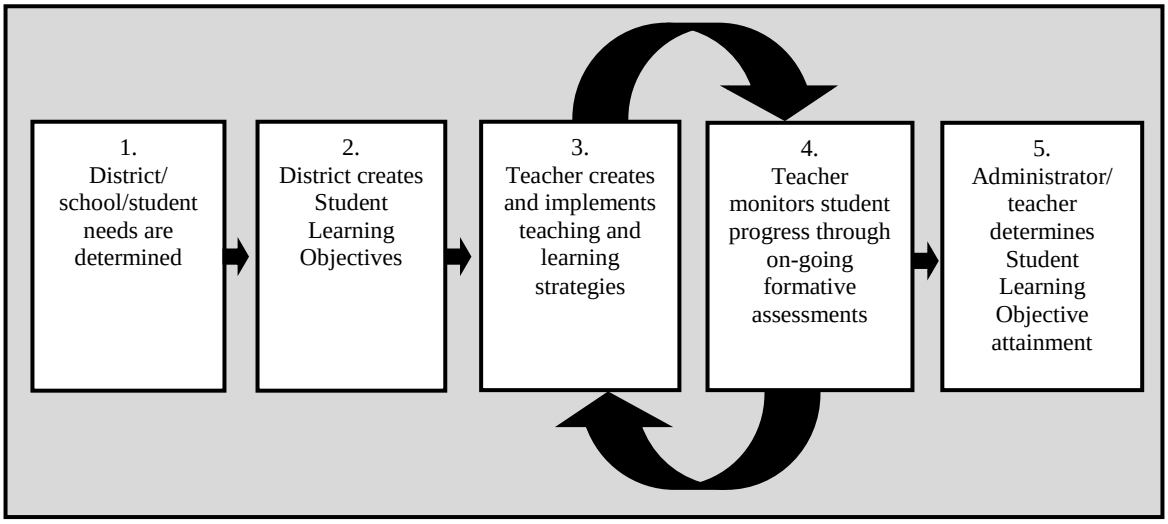
7. Prior to submission of district SLOs, appropriate district leaders should collect, review, and verify that each SLO is complete, aligned with content standards, and has rigor that is comparable to the standardized measures for tested subjects. Each superintendent or his/her designee should approve and sign all SLOs prior to submission to the GaDOE. After Phase I, pre and post-assessments should also be submitted with all SLOs.

Overview of SLO Process



1. Districts, in collaboration with teachers and school leaders, examine current data and historical data to determine the focus of SLO for specified course.
2. Prior to the instructional period, districts develop an SLO based on the needs of students and/or school academic goals as they relates to the specified course. The District SLO form is completed and submitted to the GaDOE for review and approval by the specified date.
3. Using the approved district SLO for the specified course, teachers apply the SLO for their particular class(es) and complete the district-designated teacher SLO form which specifies how the teacher will implement the SLO with his/her class(es). Teachers and evaluators meet to discuss the teacher's SLO form/plan. (The GaDOE provides a Teacher SLO form. However, districts may choose to design and utilize their own form or method of reporting.)
4. Steps 3 and 4 are part of a recursive process, whereby the teacher continues to monitor student progress toward the given target.
5. Teachers and their evaluators will meet at the mid-point of the instructional period to review student progress. The purpose of this review is to determine if all students are on track to meet their growth targets or whether instructional interventions are warranted.

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This conference should identify the need and type of additional interventions necessary for student success.

6. At the end of the instructional period, the evaluator and teacher meet to review student data and progress. The evaluator scores the teachers' progress on the SLO Evaluation Rubric and submits the data to the GaDOE.

Essential SLO Components

Focus on student learning

By focusing on student learning, SLOs help teachers, principals, and districts pay close attention to the annual academic progress made by students (particularly those in non-tested subjects and grade levels). District-determined objectives are set using baseline data and are written with the expectation that student learning in each classroom will be measured against baseline data. Only those topics that clearly state expectations for student learning growth are to be included in objective setting. A teacher's professional growth objectives are not to be included.

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. District-selected standards should warrant the year-long or course-long focus of the students and teachers. They should be rigorous, measureable, and should deepen and extend knowledge for all students in the class/group/course. Each SLO must specify the exact course, subject, grade level, and set of standards for which it was designed.

Interval of instructional time

The interval of instruction is the length of time during which the SLO will be completed. Districts should determine the pre and post-assessment administration windows for each SLO. The majority of SLOs should be written for the entire length of the course being taught. However, the nature of specific courses may require that the pre-assessment not be given at the very first of the instructional period but should be administered a short time into the instructional period. For example, in a beginning band class, students may need to learn to position and use their instruments before the progress on music standards can be pre assessed. 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 decision as to whether the SLO comprehensively addresses all standards taught in each course or if it addresses a prioritized set of standards. If a district chooses a set of prioritized standards, teachers are expected to address the entire curriculum and not exclude standards not assessed in the SLO.

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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 objectives chosen. Each SLO must have a pre-assessment and post-assessment measure. Appropriate measures of student learning gains differ substantially based on the learners' grade level, content area, and ability level. Therefore the type and format of assessments will vary based on the standards to be measured. Careful attention must be paid to how progress in relation to a given set of standards can most effectively be measured.

Commercially developed and validated assessments that correlate with the standards selected for each subject SLO may be used. (Examples of externally-developed assessments include Advanced Placement tests, Lexile Framework for Reading, Dynamic Indicators of Basic Early Literacy Skills, 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's selected standards, the following measurement tools may be appropriate for assessing student progress:

- Criterion-referenced tests, inventories, and screeners (e.g., state standardized tests, Advanced Placement tests, Scholastic Reading Inventory, Phonological Awareness Literacy Screening),
- School-adopted interim/common/benchmark assessments (e.g., county benchmark tests based on selected state standards, Career and Technical Education competency assessments, President's Physical Fitness Test),
- Authentic measures (e.g., learner portfolio, recitation, performance) using district-developed performance scoring rubrics (e.g., writing rubrics) to document the performance,
- Regionally/locally developed common assessments. Note: It is recommended that teacher-developed tests be considered as the last option only when other measures do not exist. If other measures do not exist, groups of teacher/district representatives with notable content expertise may develop common assessments (test, rubrics, etc.). Beginning with Phase II SLOs, all locally/regionally developed common assessments must be locally or regionally reviewed utilizing the SLO Table of Specifications and the SLO Assessment Criteria Table, as developed by the GaDOE.

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Assessments: The Foundation of Quality SLOs

The foundation of educational systems includes curriculum, instruction, and assessment. Curriculum, instruction, nor assessment can or should stand alone, and the alignment of these foundational systems is critical. Assessment is the process of using methods or tools to collect information about student learning. Careful and thoughtful attention to the selection and/or development of assessments is critical to the SLO process.

- Quality SLOs are built on quality assessments.
- Quality assessments inform teacher practice and student progress. A poor assessment can negatively impact teacher instruction and student learning.
- Districts must develop assessments that provide confidence and reassurance to teachers and administrators. In addition assessments should directly inform instruction and offer true indications of attainment of the standards in the SLO. This collective confidence is built on content expertise, teacher input, increasingly valid and reliable assessments, and immediate results which are meaningful for the teacher's work in the classroom.
- 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.
- To the greatest extent possible, assessments should be comparable between teachers, schools, and/or districts.
- SLOs provide unique opportunities for performance based assessments which can give students models of high quality work.
- The capacity for developing increasingly valid and reliable assessments should be built primarily at the local, regional and/or district level (and monitored at the state level).
- Improving assessments will be a gradual, ongoing process. Assessments and their results should be regularly examined by groups of trained educators using a common set of assessment criteria.
- It is not desirable that SLO assessments become additional standardized tests.
- Well-designed SLOs should increase student achievement for students individually and collectively, therefore helping schools and districts attain their student achievement goals.

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1. District/regional Assessment Team(s)

It is critically important for districts or groups of districts to form trained teams for guiding the development of locally developed assessments. Those team members might include the following:

- Subject area experts
- Exemplary teachers
- Personnel with assessment design expertise
- Personnel with access to district and school data
- College/University content personnel
- RESA personnel or School Improvement personnel

2. Assessment Development

District/regional assessment teams need to have proficiency in:

- Aligning assessments with course standards using the Aligning Curriculum and Assessment work tool.
- Completing or evaluating an assessment using the SLO Table of Specifications and the SLO Assessment Criteria Table (Described in Overview of the Assessment Cycle.)
- Assessing cognitive demand for each standard and assessment item
- Assessing the validity and reliability of the assessment items and assessment as a whole
- Assessing the assessment construction characteristics
- Understanding of the assessment cycle as described below

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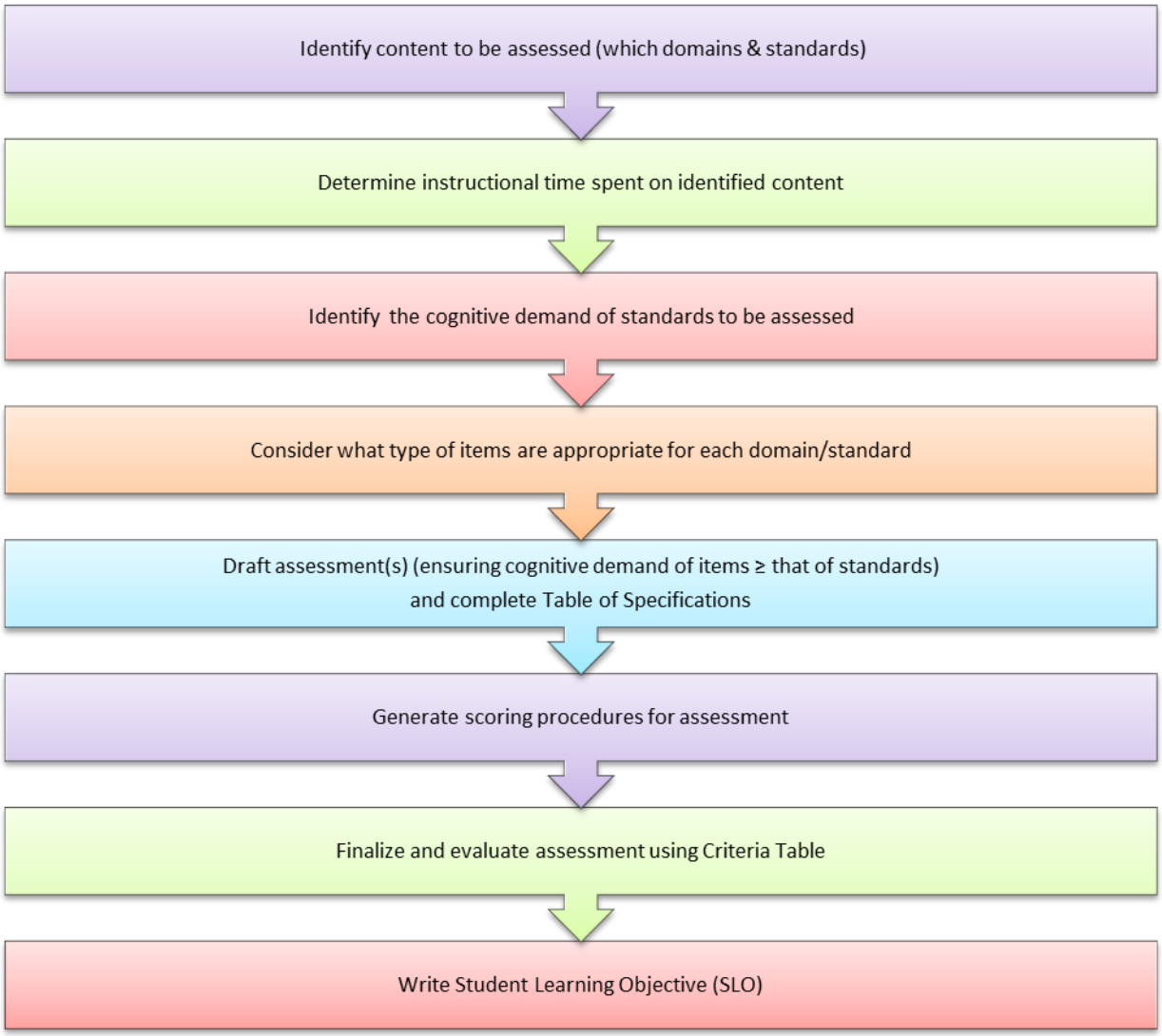
3. Overview of Assessment Cycle



The GaDOE Teacher and Leader Effectiveness Department has constructed a SLO Assessment Criteria Table for the development and evaluation of quality assessments. This tool is designed to help district/regional assessment teams evaluate the quality of their locally developed assessments which are used for SLOs. SLOs developed by inter-district collaboration are deemed Georgia Public Domain SLOs and assessments. These Public Domain SLOs are developed by the GaDOE trained teams and are available for other districts to use or adapt. The following steps provide a guide for the work of the GaDOE trained district/regional assessment teams:

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a. Identify the over-arching standards in all SLO courses.
b. Analyze the standards and identify the Language of the Standard utilizing the Aligning Curriculum and Assessment tool.
c. If there are no standards, identify the big ideas.
d. Use the SLO Table of Specifications to code the cognitive demand levels (Webb's DOK – all CCGPS formative assessments and PARCC assessments are aligned to DOK). Indicate the cognitive level with a check mark and include the corresponding verb (e.g. Comprehension- describe)
e. Use the SLO Assessment Criteria Table for the development and evaluation of quality assessments to construct or appropriately level assessment items.
f. Create performance tasks, checklists, and rubrics that require subjective judgments.
g. Administer the assessments and conduct an item analysis.
h. Use the SLO Assessment Criteria Table for the development and evaluation of quality assessments to determine the reliability and validity of the assessment items.
i. Reach consensus regarding items requiring revision or removal from the item bank.

4. Components of Assessment Cycle

Selecting and understanding standards
District teams must identify or review (if this step has already been done by the district/regional SLO team) the standards to be assessed by the SLO for each course. The three-day SLO assessment training conducted by the GaDOE is not sufficient time to develop pre and post-assessments which comprehensively assess all course standards. Initially choosing over- arching standards may help district teams focus on developing quality assessments instead of developing extensive assessments.

The content of pre and post assessments is driven by 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 which the assessments are assessing. Analyzing the standard(s) means to really understand the standard(s) by determining the content and skills needed to achieve the standard(s) **and** the level of cognitive demand required for learning the standard(s). The GaDOE developed a tool to facilitate this process called the Aligning Curriculum and Assessment tool.

Content and skills: Each standard should be 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,

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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 not only does the SLO focus on the subject matter/content, but it also provides parameters within which students can use the content in ways dictated by the standards.

There are various taxonomies that can be utilized by district/regional teams to determine cognitive demand. For the purposes of SLO assessments, the GaDOE is encouraging the use of Webb's Depth of Knowledge (DOK) since all CCGPS formative assessments and PARCC assessments are aligned to DOK. See Appendix E. However, district/regional teams may use any taxonomy which provides an adequate framework for complexity.

Creation of table of specifications
The SLO Table of Specifications (TOS) for assessment design and evaluation is used to align the standards, content, cognitive demand, and emphasis to the assessments. A TOS is analogous to using a blueprint to build a house.

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:

- Fill-in-the-blank
- Short answer
- Project(s)
- Essay
- Performance
- 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 the assessment. Validity is not an absolute characteristic; instead it is a matter of degree.

As district/regional assessment teams gain proficiency in assessment design and evaluation, they will be able to recommend ways to increase the degree of validity of regionally/locally developed assessments. Conscientious use of the SLO Table of Specifications by a team of educators is one of the best methods for increasing and judging the validity of assessments.

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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. For example, if a 150 pound person steps on a set of scales ten times, but gets results of 75, 100, 25, etc., then the scale does not produce reliable results. Rarely is an assessment perfectly reliable. As in the case of validity, reliability is a matter of degree. The goal is to design assessments that are increasingly reliable.

An important concept which influences reliability is error in assessment. As stated in the book, *Teacher-made Assessments* (Grant and Gareis, p.41, 2008):

> Error in an assessment is when an assessment item does not adequately distinguish between the student who has truly mastered the intended learning outcome and the student who has not. For example, when a student gets a question correct, not because she knows it but because of something other than knowledge of or skill in the intended learning being assess, assessment error has occurred. Similarly, if a student misses a question for some reason other than a lack of knowledge or skill, then error has occurred.

Grant and Gareis suggest the following steps to improve an assessment's reliability:

1. For non-performance tasks, include three or more test questions or items for each core objective/standard to reduce the unintended effects of error on the assessment results.
2. Review and proofread individual test questions, prompts, and directions for systematic error, including grammatical or mechanical mistakes, cultural bias, lack of clarity, etc.
3. Clarify and verify grading criteria for the test, including rubrics. Ensure intra-rater and inter-rater reliability for establishing scoring protocols and training (p. 46).

Creation of assessment(s)

Teachers and other team members should decide on the types and number of assessment items that will comprise the pre and post assessments. A reasonable amount of class time should be allotted for pre and post-assessments, typically one-two class periods. They may also create performance tasks, checklists, and rubrics that require subjective judgments. The SLO Assessment Criteria Table, as well as other sources can provide guidance with developing and evaluating assessment items.

Post item analysis

After assessments are administered, the assessment team should reconvene to conduct an item analysis of the results. Items should be critiqued based on student results to determine if revision or removal of test items is needed. Use the SLO Assessment

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Criteria Table for the development and evaluation of quality assessments (link) to determine the reliability and validity of the assessment items. Consensus should be reached by assessment teams regarding the revision items or their removal from the item bank.

Data analysis

This is the most important step of assessments in terms of instruction. Teachers of the same course should analyze the data to determine necessary instructional modifications to plans and reasonable next instructional steps based on student performance.

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:

1- The use of signed assurances (See Appendix A)
2- On-going, systematic triangulation of formal and informal data by administrators/evaluators (observations, report card grades, tests, walk-throughs, documentation of teacher work). SLO data should be somewhat consistent with other student data.
3- Collaborative planning of groups of teachers around SLOs results/implementation
4- Utilization of Georgia Public Domain SLOs and assessments
5- Use of electronic item bank (under development)
6- Use of interchangeable passages, scenarios, numbers, etc. in assessment items
7- Increased use of performance tasks
8- Checking for inter-rater reliability of ratings; employ the use of sampling to ensure consistency of raters

SLO Approval

Once districts have completed their SLOs, the SLOs should be submitted to the GaDOE for approval. The SLO Approval Rubric criteria are used to determine whether each SLO will be sent back to the district for revision or whether it will be approved. Approved SLOs are posted on the RT3 SharePoint site for other districts to view.

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How to Develop Student Learning Objectives

District SLO Leadership

In that SLO work has the potential to have a dramatic impact on student achievement and because that it impacts teacher and leader evaluations, strong instructional leadership of the SLO process is vital.

District SLO Team(s)

It is critically important for districts or groups of districts to form teams that have the needed expertise for designing district SLOs. Those team members might include the following:

- Subject area experts
- Exemplary teachers
- Personnel with assessment design expertise
- Personnel that has access to district and school data

The district team(s) assesses the needs of students by studying relevant data. While district student needs/data should be examined, individual school data are also important considerations in developing district SLOs. District/school trend data may also be examined.

Required Documentation for SLO Teams

Each team trained in the development of SLOs will be required to submit the District SLO Form. Below is a section-by-section description of the required District SLO form. (Directions for completing the form are in blue print.)

1. **The 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 standard reference number and a brief description of the standard in section 1.

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

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Teams should consider the following questions 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 should be 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 not only does the SLO focus on the subject matter/content, but it also provides parameters within which students can use the content in ways dictated by the standards.

2. Pre and Post-Assessment Measures

A brief description of the pre and post SLO assessment measures should be provided in section 2.

The quality of an SLO depends on the quality of the assessments or measures 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. Teams should consider the following validity questions when selecting or designing assessments:

- Does the format and content of the pre assessment allow students to demonstrate their current fundamental and/or background knowledge needed for this course?
- Do the results of the pre assessment readily inform the teacher's instructional practice?
- Does the assessment measure what students should know and should be able to do at the end of this course? Does it measure the specified standards?
- Does the format and content of the post assessment allow students to demonstrate their learning of the standards?

Districts should explore current formative and summative measures that they may already have to determine if those measures could be used or adapted as valid SLO measures. A list and description of commercial assessments which were used by RT3 pilot districts in Phase 1 are located in Appendix A. Commercial assessments are selected, purchased, and

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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.

The information provided in Assessments: The Foundation of Quality SLOs is designed to aid districts or groups of districts in evaluating the quality of current assessments or in designing their own assessments.

Selected assessments should measure growth. Quality assessments not only provide a pre and post score/result but should also be used to drive the teachers' instruction between the pre and post assessment results. Quality assessments provide students and teachers with clear expectations and pictures/examples of quality work.

Assessment results, particularly in reference to standardized tests results, must be reported within the SLO cycle which ends on April 1.

If and when districts alter/adapt a Georgia Public Domain SLO and/or assessment or develop their own assessments, a Table of Specifications and SLO Assessment Criteria Table should be submitted with the district SLO along with the locally developed assessments.

3. Baseline or Trend Data

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. Before writing SLO growth targets, districts should analyze their assessment data from the selected SLO subjects. These data may include any of the following:

a. Formative Assessments based on the SLO's standards
b. Benchmark tests which focus on SLO's standards
c. Unit tests from course that assess SLO's standards
d. Grades from SLO course's performance based tasks
e. Student transiency rate for school system (High? Low?)
f. Pass/Fail Rate for SLO course for last two years
g. Percentage of students receiving As, Bs, Cs, Ds, and Fs in course
h. Attendance rate for school (All classes and SLO course)
i. Teacher surveys detailing student growth predictions
j. Any formal or informal tests or course assignments with pre- and post-results (growth data)
k. Tutoring and remediation services provided for course
l. Percentage of students in SLO course with IEPs, in gifted classes, etc.
m. Acceleration methods for SLO course

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n. State-mandated standardized tests based on SLO's standards (EOCT, CRCT, GHSGT, etc.)
o. Perception survey data from stakeholders related to SLO course
p. Any other data that links classroom practices to student achievement

4. Design and Construction of SLO Statement

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

Figure 3: SMART Acronym for Developing Student Learning Objectives

Specific:	The objective is focused, for example, 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 SLO include the following:

1. Course Name
2. Pre and post assessment administration dates or windows
3. Skill or content area to be measured
4. Name of assessment measure
5. Level or scores or range of scores
6. Expected quantity of growth for each student taught by the teacher
7. Tiered targets, if applicable

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.

  In contrast, achievement objectives would specify a percentage or number of students who would attain a specified level. 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.

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The SLO growth target(s) for students should be the growth needed to achieve the students' particular academic goals and/or the recommended achievement levels designed to meet the academic needs of the student population connected to the SLO. In order to ensure that all students perform well in terms of growth, SLOs may employ target tiers. Setting one growth goal and expecting all students in the district to meet the same level of growth may not be realistic especially if there is high variability in student performance levels. Therefore, target tiers may be used to determine expected amounts of growth based on the variability of skills and knowledge students have upon beginning the course subject. As a reminder 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.

It is also recommended that district staff speak with teachers who have historically produced high student achievement to determine acceptable and realistic student growth in the subject of the SLO. Before writing the SLO, the district should understand its student population and the needs of the individuals addressed in the SLO. However, it is predicted that districts will set more effective targets as they monitor the data collected on SLOs over time.

- SLOs should be written so that teachers implementing the SLOs are very clear on what to do and when to do it. It is advisable that prior to submitting SLOs to the GaDOE for approval, the SLO has been read by a teacher(s) who has not been a part of the SLO development. Such a "cold read" or novice read of the SLO can provide the district team with valuable feedback and may save the district team and the local school staff time with the implementation of the SLO.

- Well-designed and rigorous targets in SLOs will increase student achievement which will support the attainment of school and district goals.

- When asking teachers for a "cold read' on a proposed SLO, it will be helpful to provide them with examples of other SLOs which have been through the review process. Figures 5 and 9 provide appropriate examples.

- The language of the assessment(s) should be 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.

- SLOs should be 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.

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Figure 4: Student Learning Objective Evaluation Rubric

Exemplary (3 pts)	Proficient (2 pts)	Developing/Needs Improvement (1 pt)	Ineffective (0 pts)
The work of the teacher results in extraordinary student academic growth beyond expectations during the school year.	The work of the teacher results in acceptable, measurable, and appropriate student academic growth.	The work of the teacher results in student academic growth that does not meet the established standard and/or is not achieved with all populations taught by the teacher.	The work of the teacher does not result in acceptable student academic growth.
Greater than 50% of 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.	Greater than 80% of students met or exceeded the Student Learning Objective and no more than 20% did not meet the Student Learning Objective.	Greater than 50% of students met or exceeded the Student Learning Objective.	Fewer than 50% of students met or exceed the Student Learning Objective.
☐	☐	☐	☐
Comments:			

Sample SLOs

While each SLO must have the components specified above, the SLO itself may vary. The ranges used, the reporting score, the level of proficiency expected, and the use of multiple assessment measures are all factors that would affect the design of the SLO. The samples provided here are meant to demonstrate the required components for the SLO. All SLOs may not match these samples, but these models demonstrate the basic structure that the SLO will take. Each example demonstrates a different approach to measuring growth (Figure 5 uses tiered targets while Figure 7 uses a uniform approach, but each addresses the progress of all students.)

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Figure 5: Sample SLO with Tiered Targets

Sample SLO for Grade 9-12 Environmental Science (26.06110)

From the fall assessment window (September 1-15, 2012) to the spring assessment window (March 15-April 1, 2013), 100% of Dade County's Environmental Science students will improve their pre to post assessment scores as measured by the Dade County Environmental Science Benchmark Assessment. Students will increase from their pre-assessment score ranges to the post-assessment score ranges as follows:

Tier 1: Students scoring below 50% on the pre-assessment will score ≥ 70%
Tier 2: Students scoring in the range of 50 - 74% will score ≥ 90%
Tier 3: Students scoring 75% or higher will score ≥ 95%

10% above their tier level or above 95% on the post assessment would indicate exceeding on the SLO. For example, if a student scores 35% on the pre assessment and scores 85% on the post assessment, student results would be noted as meeting and exceeding the growth target.

Figure 6: Guide for Constructing SLO with Targeted Tiers

From _____(date)_____ to _____(date)_____ , 100% of _____(student group)_____ will improve their _____(skill/content area)_____ as measured by the _____(assessment measure)_____.

Students will increase from their pre-assessment scores to the post-assessment scores as follows:

- **Tier 1**: Students scoring on the _____(*pre-assessment)_____ at ___(level/score or range of scores)____ will improve/progress to ____(level/score or range of scores)____, or higher on the _____(* post-assessment)_____.

- **Tier 2:** Students scoring on the _____(*pre-assessment)_____ at ____(level/score or range of scores)____ will improve/progress to ____level/score or range of scores)____, or higher on the _____(* post-assessment)_____.

- **Tier 3:** Students scoring on the _____(*pre-assessment)_____ at ____(level/score or range of scores)____ will improve/progress to ____level/score or range of scores)____, or higher on the _____(* post-assessment)_____.

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The following sample and guide are used when a uniform growth target is incorporated into the SLO. A uniform growth target simply means that the expectation is that all students will demonstrate equal growth as determined by the assessment. In the SLO sample in Figure 7, all students are expected to increase by one or more levels from the pre assessment to the post assessment.

Figure 7: Sample SLO with Uniform Growth Target

Sample SLO for Grade 6 Intermediate Chorus (54.0131)

From September 1-15, 2012 to March 15- April 1, 2013, 100% of 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.

Figure 8: Guide for Constructing SLO with Uniform Growth Target

From _____(date)_____ to _____(date)_____, 100% of _____(student group)_____ will improve their _____(skill/content area)_____ as measured by the _____(assessment measure)_____. Students will demonstrate progress by increasing their pre-assessment score/level on the _____(name of post-assessment)_____ by a minimum of _____(quantity of increase of numerical points, percentage increase, or rubric level)_____.

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The following sample and guide are used when growth targets are unique for each student depending on their pre assessment score. In the sample in Figure 9, growth is ½ the difference between the pre assessment score and 100.

Figure 9: Sample SLO with Individualized Growth Target

Sample SLO for Grade 9-12 World History (45.0830038)

From September 1-15, 2012 to March 15- April 1, 2013, all students enrolled in World History will demonstrate measureable growth from the pretest score to their posttest scores as measured by X District's pretest and posttest as follows:

The minimum expectation for individual student growth is based on the formula which requires students to grow by at least ½ of what would be required to improve to 100.

Pre-assessment score + (100 – pre-assessment score) / 2 = Post-assessment Target Score

Example using 40 on a pre-assessment: 40 + (100-40)/2
40 + (60)/2
40 + 30
70 is the target for post-assessment

Figure 10: SLO Guide for Individualized Growth Target

From _____(date)_____ to _____(date)_____ , all _____(student group)_____ enrolled in _____(class/subject)_____ will demonstrate measureable growth from their pretest score to their posttest score as measured by the _____(assessment measure)_____ and the following criteria:

- Minimum expectation for individual student growth on a 100-point test is based on the formula which requires students to grow by at least ½ of what would be required to improve to 100.
- Pre-assessment score + (100 – pre-assessment score) / 2 = Post-assessment Target Score

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5. Powerful Strategies to Attain SLO Targets

Section 5 of the District SLO Form is an optional portion of the form. Districts may decide to include suggested or required strategies for SLO attainment. This information may be very helpful for novice teachers or may be used by school leaders as they work to reinforce effective instructional strategies. The frequency of these strategies may also be included.

6. Mid-year or Mid-course Review

A description of the mid-year or mid-term review should be added to section 6.

A mid-year or mid-term review of student progress toward growth targets is required. The purpose of this review is for teachers to examine and share student progress with their evaluator. It is important to determine if students are on track to achieve growth targets and whether instructional adjustments or interventions are needed. The district may determine the format of the mid-year or mid-term review, may recommend/suggest specific mid-year or mid-term actions, or may leave this decision up to the school evaluator and/or teacher.

Teacher's role with SLOs

As stated earlier in this document, it is critical to include expert teachers and content specialists in the development of district SLOs. After districts have developed SLOs and received GaDOE approval of SLOs, the SLOs should be given to teachers who will administer the pre-assessments. Pre and post-assessments should be administered during the district determined administration windows. The GaDOE provides a suggested but not required Teacher SLO Form (See Appendix F). The purpose of this form or a similarly developed district form is to outline the meetings required to fulfill the guidelines for the SLO process. Evaluators should meet a minimum of three times each year with their teachers regarding progress toward SLO targets. This form should include an opportunity to address each of the following components of the SLO process:

- Purpose of SLOs
- Effective teaching practices
- When pre and post assessment data are collected
- How pre and post assessment data are recorded
- Format for mid-year or mid-course review

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Submission Process

1. Phase II: Districts must submit each SLO for GaDOE approval before local teachers begin implementation of their SLO plans. A separate District SLO Form should be completed for each district SLO and should be submitted to the GaDOE on or before July 2, 2012. SLOs should be submitted to the GaDOE by a person designated at the district level to review and sign-off on all submissions. Individual teachers or staff members should not submit SLOs for approval to the GaDOE. SLOs completed and reviewed at the district level should be submitted to the Teacher and Leader Effectiveness Program Manager at SLO@doe.k12.ga.us.

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Approval Rubric

	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**
Identifying Information		☐ State Course number and name provided ☐ District name and grade level/s provided	☐ No state course number ☐ No state course title ☐ No grade level/s provided ☐ No district name provided
Standards	☐ Selected standard 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 ☐ Brief description of standard(s) provided	☐ Too few standards are selected to adequately assess student knowledge in course ☐ 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 ☐ No collaboration is evident

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Baseline or Trend Data	☐ 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
Assessment or Measure for pre and post assessment	☐ Alignment between standards and assessment has been approved by GaDOE-trained assessment team using the SLO Table of Specifications ☐ Utilizes externally developed, reliable and valid purchased assessments Or ☐ Locally developed assessments have been approved by GaDOE-trained assessment team using the SLO Assessment Table of Specifications ☐ 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 adequately described (for purchased assessments) Or ☐ Locally developed assessments are submitted; SLO Assessment Table of Specifications has been accurately completed for locally/regionally developed assessments. ☐ Pre-assessment /post-assessment are utilized by multiple teachers/schools	☐ Assessment is not aligned with standards ☐ Locally developed assessments are not submitted ☐ Purchased assessments are not described ☐ SLO Table of Specifications was not utilized in designing or evaluating locally/regionally developed assessment(s) ☐ Table of Specifications does not accurately reflect assessment items/tasks

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SLO Statement	☐ SLO is clear and coherent on first read ☐ 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 SLO Assessment Table of Specifications ☐ SLO was developed by content experts and practitioners ☐ Course proficiency is stated.	☐ SLO is clear and coherent ☐ 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	☐ SLO is not clear and coherent ☐ 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
Time Bound	☐ Instrument(s) is used to measure student growth from beginning of instructional period to end of instructional period. ☐ District standardized time frames for administration of pre and post-assessment have been determined and will be observed.	☐ SLO specifically states the instructional period.	☐ No instructional time period is listed ☐ Time period listed is outside the SLO target calendar
District approved	☐ District establishes and provides procedures/guidance/requirements for usage of district SLOs and accompanying assessments. ☐ Rigor of SLO is comparable to the rigor of "tested" subjects as determined by analysis of district data	☐ District approves/recommends this SLO for teachers at the designated grade level(s) and in these subject area(s) ☐ Signature of Superintendent or designee	☐ SLO not submitted via the proper procedures ☐ Required signature of Superintendent or designee is not provided ☐ Locally/regionally developed assessments

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	☐ Time for post-analysis of student data and SLO revision is predetermined and scheduled ☐ All locally/regionally developed assessments have been evaluated using the SLO Assessment Criteria Table.	is provided with SLO ☐ Locally/regionally developed assessments have been evaluated using the SLO Assessment Criteria Table.	have not been evaluated using the SLO Assessment Criteria Table.

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Timeline

Figure 11 : Student Learning Objectives Timeline

February - June 2012	• Districts considers needs of students, demands of grade level standards, and baseline data and creates SLOs for Phase II, including pre- and post-assessments • Collaborating districts participate in three-day training on SLO assessments provided by the GaDOE
May 2012	• District reviews the end of the year data on Phase I SLOs and revises as necessary. • Train-the-Trainer SLO Assessment Training for RT3 and new districts
June 2012	• Districts begin work on SLOs for Phase III.
July 2, 2012	• The district submits Phase II SLOs to the GaDOE for review and approval
August - September 2012	• District shares revised SLOs for Phase I and SLOs for Phase II with teachers.
September - October 2012	• Teachers use district SLOs and administer pre assessments. • Teachers complete a spreadsheet with student pre assessment scores; analyze the class/group data. • Teachers complete Teacher SLO Form, and implement teaching strategies. • Teachers meet with their evaluators to finalize their SLO plan.
August 2012 – March 2013	• Teachers implement teaching strategies and monitor student progress toward attainment of SLO(s).
December - January	• Teachers complete mid-year or mid-courses review for SLO(s) • Teachers meet with their evaluator to discuss mid-year progress on SLO(s) • Evaluators determine if Professional Growth Plan is needed for SLO attainment
April 1, 2013	• Teachers administer post-assessment.
April 15, 2013	• Teachers submit class/group data to building level evaluator. Evaluator completes SLO Evaluation Rubric and submits SLO information (TBD) to the GaDOE.
May 2013	• GaDOE calculates TEM using all components of the TKES.

Add verification of rosters.

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They will assign an end-of-year rating using an evaluation rubric with the following levels:

Exemplary, Proficient, Developing/Needs Improvement, and *Ineffective* as shown in Figure 12.

Figure 12: Student Learning Objective Evaluation Rubric

Exemplary (3 pts)	**Proficient (2 pts)**	**Developing/Needs Improvement (1 pt)**	**Ineffective (0 pts)**
The work of the teacher results in extraordinary student academic growth beyond expectations during the school year.	The work of the teacher results in acceptable, measurable, and appropriate student academic growth.	The work of the teacher results in student academic growth that does not meet the established standard and/or is not achieved with all populations taught by the teacher.	The work of the teacher does not result in acceptable student academic growth.
Greater than 50% of 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.	Greater than 80% of students met or exceeded the Student Learning Objective and no more than 20% did not meet the Student Learning Objective.	Greater than 50% of students met or exceeded the Student Learning Objective.	Fewer than 50% of students met or exceed the Student Learning Objective.
☐	☐	☐	☐
Comments:			

The Student Learning Objective score then will be scaled so that it counts for a specific amount of the overall Teacher Effectiveness Measure.

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Appendix A: Teacher Assurances

As related to Teacher and Leader Keys Evaluation Systems

Any action that compromises test/assessment security, leads to the invalidation of an individual student's or a group of students' 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 following assurances. The list is not exhaustive. Any concerns about test/assessment security or proper implementation of the TKES and LKES components must be reported to the GaDOE immediately.

	Initials	Assurances
1.		Teachers have been trained in the appropriate use of all components of the Teacher and Leader Keys Evaluation System.
2.		Students are prepared for the post assessment by the alignment of curriculum and instruction to the district content standards.
3.		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. However, communication as to how the results will be used for an individual teacher's evaluation is prohibited.
4.		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.
5.		An appropriate testing environment is provided.
6.		All eligible students are assessed.
7.		All reasonable and allowable accommodations for the administration of the assessment are provided to persons with disabilities or special needs.
8.		Appropriate security precautions are taken before, during, and after the administration of the assessment and the survey.
9.		Reasonable quality control procedures are maintained before, during, and after administration and scoring of the assessment and the survey.
10.		No part of the assessment or survey is revealed to students prior to the administration.
11.		Distribution of assessment and survey materials occurs immediately prior to administration.
12.		The assessment/survey occurs during the specified schedule of administration.
13.		The specified schedule of administration provides for make-up opportunities for students absent during the administration of the assessment or the survey.

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14.		Teacher actions before, during, or after assessments should not give any particular student or class of students an unfair advantage over others.
15.		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.
16.		Pre and post assessment will administered within the district-designated pre and post assessment windows. Assessments be scored and recorded (as determined by evaluator) in a timely manner.
17.		A whistle blower procedure has been established and communicated to all staff. Staffs are responsible for reporting any breaches of assurances.
18.		Student assessments and all scoring documents are maintained according to the district's records retention schedule.

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

19.		Coaches examinees during testing, performance assessments, or surveys or alters or interferes with examinees' responses in any way;
20.		Gives examinees access to assessment or survey questions or prompts prior to administration;
21.		Copies, reproduces, or uses in any manner inconsistent with test security regulations including all or any portion of test booklets, assessments, or surveys;
22.		Makes answers available to examinees outside the assessment window or assessment time;
23.		Reads or reviews test questions before , during or after testing (unless specified in the IEP, IAP or ELL/TPP);
24.		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 result in a referral to the PSC.);
25.		Uses or handles secure assessments, prompts, survey questions, and/or answer documents for any purpose other than examination;
26.		Fails to follow administration directions for the assessment or survey;
27.		Erases, marks answers, or alters responses on an answer document or interferes with student as they respond to computerized questions, etc.
28.		Participates in, directs, assists, counsels, encourages or fails to report any of the above listed acts.

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

_____
Teacher Name

_____ _____
Teacher signature Date

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Appendix B: List of Commercial Assessments used for Phase I SLOs (waiting on permission from Legal)

District Selected Assessments

AIMSWeb Reading

Company: Pearson Learning

Assessment:	Yes
Instruction:	No
Grades:	K-8
Subject:	Reading
Delivery:	Paper
Frequency:	Fall, Winter, Spring
Reporting of Scores:	Words Read Correctly Qualitative Checklist Percentile Rank/or Norm Tables
Acronyms:	R-CBM and MAZE RCBM=Reading Curriculum Bases Measure MAZE=Mult. Choice Cloze Task

The AIMSweb system includes benchmarks and progress monitoring. The *AIMSweb Benchmark* is administered thrice yearly - fall, winter, and spring - to monitor progress and improvement of individual students. The Reading Benchmark includes a set of three graded and equivalent Standard Benchmark Reading Assessment passages used in grades 1-8 to develop school reading benchmarks. The *AIMSweb Progress Monitor*, which includes 30 Standard Progress Monitoring Reading Passages (20 at grade 1 and primer level), is used to frequently monitor the progress of individual students and determine rate of improvement and intervention success. The AIMSweb Reading System offers three curriculum-based measurements: R-CBM, MAZE, and Early Literacy. **AIMSweb R-CBM** is a web-based tool that measures general reading proficiency whereas **AIMSweb MAZE** measures reading comprehension.

The **AIMSweb R-CBM** enables evaluation of oral reading fluency by providing multiple Curriculum Based Measurement (CBM) assessments for universal screening and progress monitoring. Students read aloud for one minute from meaningful, connected, and graded passages of texts that are written to represent general curriculum. The number of words read correctly and errors are counted. The emphasis is placed on the number of Words Read Correctly (WRC), in essence, the students' "best" reading, not fastest reading. The R-CBM yields both a quantitative and qualitative score. The quantitative scores are reported in standard format WRC/Errors; thus, 142/3 would indicate a student read 142 for one minute, with 3 errors. The qualitative scores are derived using a checklist wherein teachers use their professional judgment regarding the quality of the students' reading of the three benchmark passages. Extensive research supports that the R-CBM has proven to be a valid general outcome measure for reading, including reading comprehension.

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The **AIMSweb MAZE** is a multiple-choice cloze task that students complete while reading silently. The first sentence of a 150-400 word passage is left intact. Thereafter, every 7th word is replaced with three words inside parenthesis. One of the words is the exact one from the original passage. Scores are attributed based on the number of correct answers. Science-based research has shown that this provides a reliable and valid measure of reading comprehension.

AIMSWeb Math

Company: Pearson Learning

Assessment:	Yes
Instruction:	No
Grades:	K-8, 2-8
Subject:	Math
Delivery:	Paper
Frequency:	Fall, Winter, Spring
Reporting of Scores:	Percentile Rank/or Norm Tables
Acronyms:	M-COMP and M-CAP M-CAP = Math Concepts and Application

The AIMSweb MComp (Math Computation) is a web-based tool that enables evaluation of basic math skills and personalized learning by providing multiple Curriculum Based Measurement (CBM) assessments for universal screening and progress monitoring. The AIMSweb M-CAP (Math Concepts and Applications) assesses the general mathematics problem-solving skills expected in grades 2-8. It's a test of short duration (8 minutes for grades 2-6 and 10 minutes for grades 7-8). Benchmarking is done three times a year to yield data points enabling determinations regarding student progress (e.g., on-level, struggling, or exceeding). Both the M-COMP and the M-CAP contain three benchmark probes and 30 progress monitoring probes; the M-CAP includes 33 additional probes per grade and assesses a broad set of math domains, including number sense, measurement, operations, patterns and relationships, and data. Student benchmark targets are based on norm tables.
Reference: http://www.aimsweb.com/

DIBELS

Company: **University of Oregon**

Assessment:	Yes
Instruction:	No
Grades:	K-3
Subject:	Reading
Delivery:	Paper, online data management by third parties

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This is a free paper assessment that must be administered one on one to students by a teacher. Thus, open to teacher-testing error and bias! Tests phonological awareness, nonsense word fluency, and fluency with connected text. This is considered to be early reading. Schools can pay $1 per student per year to be able to enter raw data and get report generation. The DORF (DIBELS Oral Reading Fluency) automatically scores all tests and results are immediate. DIBELS doesn't look at as many measures and also isn't as thorough. It is considered a "screening" test by the authors of the test where our assessment is a true "diagnostic" assessment. See full analysis on main sales tool page. Sopris West prints paper versions of DIBELS that schools may purchase.
Reference: http://www.letsgolearn.com/reviews/comments/university_of_oregon/

DRA

Company: Pearson Learning

Assessment:	Yes
Instruction:	No
Grades:	K-4
Subject:	Reading
Delivery:	Paper

The DRA is an individually administered, criterion-referenced informal reading assessment conducted one on one with students. It can be administered three to four times each year to all students in Grades K-3 and English Learners in Grade 4. Results are used to determine a student's instructional reading level, guide the teacher in planning the classroom instructional program, identify appropriate supports and interventions, and document progress over time. It requires detailed teacher training since the teachers must analyze student results. In practice, this may introduce higher variance (or errors) in the results. It centers on students reading passages and teachers making analysis on their abilities based on their errors during oral reading and afterwards when teachers ask students comprehension questions. The analysis by the teacher is critical in determining results.
Reference: http://www.letsgolearn.com/reviews/comments/university_of_oregon/

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PEARSON

Grade Level	DRA2 Level	Guided Reading Level	Lexile Level
Kindergarten	A-1	A	N/A
	2	B	N/A
Pre-Primer	3	B	N/A
	4	C	N/A
	6	D	N/A
	8	E	N/A
Primer	10	F	N/A
	12	G	N/A
Grade One	14	H	200-249
	16	I	250-299
Grade Two	18	J	300-349
	20	K	350-399
	24	L	400-499
	28	M	450-499
Grade Three	30	N	500-549
	34	O	550-599
	38	P	600-699
Grade Four	40	Q-T	700-749
	40	Q-T	750-799
	40	Q-T	800-849
Grade Five	50	S-W	800-849
	50	S-W	850-899
	50	S-W	850-899
Grade Six	60	V-Y	900-949
	60	V-Y	900-949
Grade Seven	70	Z	1000-1100
Grade Eight	80	Z	1000-1200

DRA2 Print and Online

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FOUNTAS AND PINNELL

BASIC ASSESSMENT SYSTEM, 1 & 2

Company: Heinemann

Assessment:	Yes
Instruction:	No
Grades:	Grades 1-3 (SLO) Available for grades K-8
Subject:	Reading Performance
Format:	Leveled Texts, Questions Teacher administered Given one-on-one to student Some timed sections
Reporting of Scores:	A-Z Text Gradient
Acronyms	Fountas and Pinnell (F & P) Benchmark Assessment System (BAS)

The Fountas and Pinnell (F & P) Benchmark Assessment System (BAS) is a comprehensive standardized test designed to determine students instructional and independent reading performance levels based on the F & P A-Z text gradient. The assessment has two parts: System 1 (A-N text gradient) and System 2 (O-Z text gradient). This quantifiable assessment is usually given three times per school year (fall, winter, and spring), and it uses leveled fiction and nonfiction books written for evaluation purposes. The books have been vetted by experienced teachers and a broad spectrum of children through various field studies. As children in grades K-8 read the assessment texts and answer related questions (comprehension conversations), teachers check for accuracy, self-correction, comprehension, and fluency. Results are recorded on F & P reading forms (running records), which can be stored in an online data management system. Since the teacher hand scores the test, training on scoring practices and assessment implementation is needed before teachers can give the test to children. Test results are used to plan instruction, create reading groups, identify students needing interventions, inform parent teacher conferences, and document student progress throughout the school year. Most of all, results are used to appropriately place students in the Guided Reading Program created by Fountas and Pinnell.

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Georgia Online Assessment System

Company: Georgia Department of Education

Assessment:	Yes
Instruction:	No
Grades:	1 - 12
Subject:	The OAS enables students in Georgia's public schools to access tests that consist of the same kinds of questions as appear on the state's assessments in Reading, English/Language Arts, Mathematics, Science, and Social Studies in the Criterion-Referenced Competency Tests (CRCT), the End of Course Tests (EOCT), and the Georgia High School Graduation Tests (GHSGT).
Format:	Computer-based
Reporting of Scores:	Percent correct on each test aligned with did not meet, meets, or exceeds objectives
Acronyms	OAS – Online Assessment System

The Georgia Department of Education (GaDOE) is continuing to provide the 2011-2012 release of the Georgia Online Assessment System (OAS). The OAS represents a dedicated resource for schools, districts, classroom teachers, students and parents that allows for ongoing classroom instruction and student learning. This site allows educators to have access to test items aligned to the state mandated curriculum to develop assessments that inform teaching and learning. It allows students and parents transparency on the expectations placed on students relative to improving student achievement. This system is another resource available and designed to help all Georgia educators, students and parents as part of our common goal to lead the nation in improving student achievement.

Gifted Habits of Mind -

The best I can tell this assessment is likely based on the research completed by Bena O. Kallick, Arthur L. Costa
http://shop.ascd.org/Default.aspx?TabID=208&Category=BOOK&Subcategory=MIND&gclid=CMHv_pqJo60CFQ5T7AodQUtwpA

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THE GLOBAL STRATEGY STAGE & INDIVIDUAL KNOWLEDGE ASSESSMENT FOR NUMERACY

Company: New Zealand Maths

Assessment:	Yes
Instruction:	No
Grades:	Grades 1-3 (SLO) Available for grades 1-6
	Mathematics
Reporting of Scores	Eight Developmental Stages Emergent (Stage 1) to Advanced Proportional (Stage 8)
Format:	Oral and Paper/Pencil Tests; Some timed sections Administered by teacher Given one-on-one to student
Acronyms	GLOSS-The Global Strategy Stage IKAN-Individual Knowledge Assessment for Numeracy

The Global Strategy Stage (GLOSS) and Individual Knowledge Assessment for Numeracy (IKAN) Assessments are formal and informal tests from New Zealand. (The tests have different delivery modules; thus, both tests contain formal and informal sections.) The GLoSS measures student strategy development using a series of questions (observable tasks) that increase in difficulty. The GloSS enables teachers to identify the strategy stage (1-8) students are operating at across all three strategy domains (addition/subtraction, multiplication/division, and ratios/proportions). This is known as the global strategy stage. The IKAN monitors whether or not students are progressing to the appropriate global strategy stage development. The IKAN identifies the learner's knowledge stage based on the knowledge domain (number sequence, number order, fractions, place value, and basic facts). This process is known as the global knowledge stage. The IKAN interview is for students at the counting stages of the number framework. IKAN data reveals students' recognition and ability to sequence numbers in four different levels (up to 10, up to 20, up to 100, and up to 1000). There is a specific correlation between the IKAN data and the strategy stage for GloSS. The IKAN is given first, followed by the GLoSS, and then the IKAN is given again, if students make it past the strategy questions in the GLoSS. Results from these assessments can be used to inform instruction, create groups, monitor student progress, and determine at-risk, average, and high achieving learners. Results are recorded on Class Summary Sheets, and the tests are given two times per school year (fall and spring). Assessments and forms can be downloaded or used offline.

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G. R. A.S. P. West Georgia RESA created G.R.A.S.P. Reading Probes

Background of Fluency Maze

The reading assessments for GRASP consist of two different types. Beginning in the middle of first grade and ending in ninth grade, GRASP offers an Oral Reading Fluency universal screener along with reading fluency probes for progress monitoring. The other screener is MAZE comprehension for grades 2-9.

The Oral Reading Fluency screeners are taken from a free product offered by CBM (Curriculum Based Assessment). These screeners come directly from the website easyCBM.com. CBM was developed at the University of Minnesota by Stan Deno and Phyllis Mirkin in the late 70's and early 80's. The assessment principles behind the easyCBM system are the results of over 30 years of published, peer-reviewed educational research.

The MAZE comprehension screeners for grades 2-9 were created at West Georgia RESA with permission from Kirt Ulmer, the lead developer of easyCBM.com. Several grade level passages from the Oral Reading Fluency passages provided from easyCBM.com were selected and turned into MAZE passages. MAZE is a multiple-choice cloze task that students complete while reading silently. The first sentence of a 150-400 word passage is left intact. Thereafter, every 7 th word is replaced with three words inside parenthesis. One word in the parenthesis is the exact one from the passage and the other two words are distracters.

Current norms for Oral Reading Fluency are derived straight from the research cited by AIMSweb (2005) and Hasbrouck & Tindal (2006) in the CBM in Reading: Instructional Decision-Making Strategies Manual. The norms for the MAZE comprehension come from AIMSweb (2006), Florida Center for Reading Research (2006) and data from Stecker and Lembke (2005)

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MAP

Assessment Title: Measures of Academic Progress
Company: Northwest Evaluation Association

Assessment:	Yes
Instruction:	No
Grades:	K-12
Subject:	Reading, Mathematics, and Language Science (concepts, processes, and general science)
Format:	Computer Adaptive Testing
Reporting of Scores:	RIT
Acronyms	MAP

Measures of Academic Progress (MAP) assessments provide detailed, actionable data that is correlated to the curriculum and standards on each student's unique learning path. Northwest Evaluation Association works with educators to create test items that interest children and help to capture what they know and what they are ready to learn. These assessments are aligned to both national and state standards. MAP adapts to students responses as they take individualized tests. If a student answers a question correctly, the test presents a more challenging item. If a student answers a question incorrectly, MAP offers a simpler answer. Students take a computer-based assessment 3 times a year. Every test item on a MAP assessment corresponds to a value on the RIT Scale (for Rasch Unit), so educators gain a deep understanding of what a student knows. RIT assigns a value of difficulty to each item with an equal interval measurement, so the difference between scores is the same regardless of whether a student is at the top, bottom, or middle of the scale. RIT measures understanding regardless of grade level, so the information helps to track a student's progress from year to year. The information gained provides formative, summative, and predictive data at the system, school, class and individual student level.

NAEP – National Assessment of Educational Progress

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NOCTI

Assessment Title: NOCTI
Company: National Occupational Competency Testing Institute

Assessment:	Yes, Pre and Post-Assessment
Instruction:	Yes
Grades:	9-12
Subject:	Multiple Areas for Career and Technical Courses and Career Pathways
Format:	Performance and Paper
Reporting of Scores:	Competency Levels Reported by Individual Career Courses and Pathway Strands Using National Averages and Criterion-Referenced Cut Scores
Acronyms	NOCTI

NOCTI is a leading provider of high-quality technical competency assessment products and services for secondary and post-secondary educational institutions in the United States and around the world. Our services include job and task analysis, standards development, assessment development and delivery, scoring and analysis services, and student recognition. NOCTI also has expertise in specialized reporting, professional development services, and state assessment program management at both the local and state levels. This assessment is currently being used throughout the state in Career and Technical Programs.

Job Ready
Measure the skills of those who complete a secondary or post-secondary technical program. Job Ready assessments consist of both a written and performance component.

Pathway
Broader in scope than NOCTI's Job Ready assessments, Pathway assessments measure the technical skills within a pathway or cluster as well as soft skills and academic skills contextualized to the occupation.

Score Reporting
Both national averages and criterion-referenced cut scores are included on the standard score reports for all Job Ready and Pathway assessments. This information can be a helpful resource when analyzing score results for gauging student knowledge and determining program improvement needs.

NSE - National Spanish Exam
http://www.nationalspanishexam.org/index.php/exam-content/exam-specifications

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Presidential Physical Fitness Test

Company: The President's Challenge Program

Assessment:	Yes
Instruction:	No
Grades:	1 - 12
Subject:	Physical Education
Format:	Performance-based
Reporting of Scores:	Presidential Physical Fitness Award—To earn this award, students must score at or above the 85th percentile on all five activities. National Physical Fitness Award—Students earn this award for scoring above the 50th percentile on all five activities. Participant Physical Fitness Award—Students earn this award if they participate in all five activities, but one or more of their scores fall below the 50th percentile.
Acronyms	PPFT – Presidential Physical Fitness Test

The Physical Fitness Test includes five activities that measure muscular strength/endurance, cardio-respiratory endurance, speed, agility, and flexibility:

Curl-ups (or partial curl-ups)
Shuttle run
Endurance run/walk
Pull-ups (or right angle push-ups or flexed-arm hang)
V-sit reach (or sit and reach)

It is recommend to test students at least twice a year, in the fall and spring, so they can see how they've progressed through the year. Before getting started, educators should make sure each student is healthy enough to participate. In fact, it is recommended that teachers review each student's medical status to identify medical, orthopedic, or other health issues that should be considered. Students should be taught the correct techniques for all activities, including proper pacing and running style. There is no limit to the number of tries students may have on each activity.

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Rigby FLUENCY RUBRIC

	4	3	2	1
Smoothness	Natural speaking rate Recognizes punctuation	Some hesitation or repetitions Recognizes punctuation	Halting speech Uses some phrasing	Isolated words spoken Does not use punctuation
Expression	Uses voice inflection Uses expressive Intonation Noticeable difference when dialogue is used	Uses some inflection and intonation Some difference when dialogue is used	Little change in voice No difference when dialogue is used	Speaks in monotone 'Calls' words
Self Corrections	1:2 self correction rate	1:3-1:4 self correction rate	1:5-1:6 self correction rate	1:7 or less self correction rate
Words Correct per Minute	Higher than appropriate grade range for time of year (see below)	Within top half of appropriate grade range for time of year (see below)	Within bottom half of appropriate grade range for time of year (see below)	Below appropriate grade range for time of year (see below)

ORAL READING FLUENCY GUIDELINES (Hasbrouck & Tindal, 1992)

GRADE	FALL WCPM	WINTER WCPM	SPRING WCPM
2	53-82	78-106	94-124
3	79-107	93-123	114-142
4	99-125	112-133	118-143
5	105-126	118-143	128-151

Kathy Hitt 11/00

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SRI

Company: **Scholastic**

Assessment:	yes
Instruction:	no
Grades:	K-12
Subject:	Reading
Delivery:	Online and Paper

The Scholastic Reading Inventory is an online measure of K-12 reading comprehension. Scores are returned on the Lexile framework, providing one measure of reading comprehension. While it is an adaptive assessment, this is not a fully diagnostic test and does not test across multiple constructs of reading.

STAR –

Assessment Title: **STAR Early Literacy**
Company: Renaissance Learning

Assessment:	Yes
Instruction:	No
Grades:	Pre K - 3
Subject:	Reading
Format:	Computer-based
Reporting of Scores:	Scale scores identify whether students are emerging, transitional, or probable readers
Acronyms	

As a criterion-referenced test, STAR Early Literacy provides performance data on specific skills. Reports summarize this data for individual students and for the class as a whole. This enables teachers to target objectives based on strengths and weaknesses, choose appropriate materials, group students with similar needs, and monitor progress for students in intervention.
STAR Early Literacy assesses 41 different skills in the seven key areas of reading development.
How STAR Early Literacy Works:
Students take the test. After being given a demonstration on how to use the keyboard or mouse, what the questions look like, how to hear a question repeated, and how to select an answer, students can test independently. Continual adjustment of subsequent questions as the student responds quickly pinpoints the test-taker's actual achievement level.
Teacher receives results. The STAR Early Literacy assessment can be given in just 10 minutes or less.
Results uses. STAR Early Literacy identifies what skills students are proficient on, or excelling at, and where intervention may be needed. The assessment presents screening and progress-monitoring data so priorities for instruction and intervention can be set by the teacher.

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Assessment Title: **Star Math**
Company: Renaissance Learning

Assessment:	Yes
Instruction:	No
Grades:	1 - 12
Subject:	Math
Format:	Computer-based
Reporting of Scores:	Shows students current and projected scale scores against state benchmarks—did not meet, meets, or exceeds expectations
Acronyms	

STAR Math content is based on analysis of professional standards, curriculum materials, test frameworks, and content-area research, including best practices for mathematics instruction. Rigorous norming, reliability, and validity studies take place to ensure that STAR Math Enterprise provides an efficient and precise measurement of student math achievement.

How Star Math Works:

Students take the test. Item difficulty adjusts to the student's ability level. Each successive response gives STAR Math Enterprise more data to pinpoint the test-taker's actual achievement level.

Teachers receive the results. Each STAR Math Enterprise assessment is approximately 15 minutes in length. An entire class can be assessed in a single period.

Results uses. Teachers are provided with skill-specific, actionable data to help target instruction and practice, select students for intervention, and predict state-test performance.

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Assessment Title: **Star Reading**
Company: Renaissance Learning

Assessment:	Yes
Instruction:	No
Grades:	1 - 12
Subject:	Reading
Format:	Computer-based
Reporting of Scores:	Shows students current and projected scale scores against state benchmarks—did not meet, meets, or exceeds expectations
Acronyms	

STAR Reading content is based on analysis of professional standards, curriculum materials, test frameworks, and content-area research, including best practices for reading instruction. Rigorous norming, reliability, and validity studies take place to ensure that STAR Reading Enterprise provides an efficient and precise measurement of student reading achievement.

How Star Reading Works:

Students take the test. Item difficulty adjusts to the student's ability level. Each successive response gives STAR Reading Enterprise more data to pinpoint the test-taker's actual achievement level.

Teachers receive the results. Each STAR Reading Enterprise assessment is 15 minutes in length. An entire class can be assessed in a single period.

Results uses. Teachers are provided with skill-specific, actionable data to help target instruction and practice, select students for intervention, and predict state-test performance.

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STEEP

Assessment Title: STEEP
Company: iSTEEP, LLC

Assessment:	Yes	**Assessment:**	Yes
Instruction:	No	**Instruction:**	No
Grades:	Kindergarten (SLO) Available in grades K-6	**Grades:**	First Grade (SLO) Available in grades K-6
Subject:	Letter Awareness/ Phonemic Awareness	**Subject:**	Math Fluency/Computation (Addition to sums of 10)
Format:	Timed (one minute) oral test Teacher administered Given one-on-one to student	**Format:**	Timed (two minutes) paper/pencil test or online
Reporting of Scores:	Three Levels: Frustrational (below grade level), Instructional (progressing toward mastery), and Mastery (on or above grade level)	**Reporting of Scores:**	Three Levels: Frustrational (below grade level), Instructional (progressing toward mastery), and Mastery (on or above grade level)
Acronyms	STEEP-System to Enhance Educational Performance	**Acronyms**	STEEP-System to Enhance Educational Performance

STEEP is a K-12 research based formative evaluation system for reading (phonemic awareness, fluency, and comprehension) and math (concepts, computation, and focal points). STEEP is a web based assessment that screens students using curriculum based measurement probes in reading or math. The downloaded tests are usually given 3-4 times per school year, and the results can be used to plan instruction and/or intervention services. Based upon STEEP results, student's unique needs are identified and appropriate intervention tools are recommended based on these needs. STEEP also monitors student progress and provides data to determine if students are responding well to their planned intervention(s). STEEP results can be examined to determine if a child's at-risk status is due to a disability or instructional issues. The system requires a district wide site license, and all schools in the district must be STEEP enrolled.

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Study Island

Assessment Title: Study Island
Company: Archipelago Learning

Assessment:	Yes
Instruction:	Yes
Grades:	2-8, High School
Subject:	All skill areas tested on CRCT/GHSGT/EOCT
Format:	Web-based
Reporting of Scores:	Student's performance (% score) in each attempted topic
Acronyms	

The Study Island CRCT/GHSGT/EOCT Preparation Program is specifically designed to help students master the content specified in the Georgia Performance Standards (GPS). Study Island's focus on the Georgia Performance Standards enables students to improve their performance in all skill areas tested on the CRCT/GHSGT/EOCT in grades 2 through 8 and high school.

The user-friendly interface allows students to move through the program step-by-step. Each section has a pre-test and a post-test, as well as topics that cover each of the Georgia Performance Standards. Topics consist of questions, answers, explanations, and lessons that address the specific skills required in order to master the Georgia Performance Standards and CRCT/GHSGT/EOCT.

SWELL (something for foreign language)

http://www.swell.org.nz/resources.htm#WhatIsSwell

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Thinkgate:

Assessment Title: **Elements Assessment Management System**
Company: Thinkgate

Assessment:	Yes
Instruction:	No
Grades:	1 - 12
Subject:	All
Format:	Web-based
Reporting of Scores:	Student performance (% correct) and percentile rank
Acronyms	AMS – Assessment Management System

Elements™ is designed to assist school districts with the key areas of curriculum, assessment, instruction, and planning and organization.
This web-based tool becomes a comprehensive resource to help empower educators to make more efficient and effective decisions for themselves and the students whom they support. In curriculum, all standards and curriculum can be organized and sequenced using the pacing guide and blueprint features of the curriculum plan. Additionally, with the assessment component of **Elements™** , the curriculum plan can be evaluated and monitored in multiple ways to identify strengths and weaknesses.

TIPC (Technology Innovation/Integrations Progression – used for gifted K-5)
http://www.edutopia.org/technology-integration

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TSARS Mock Writing Assessment

TSARS is the scoring company for the official Georgia Writing Assessments. This company uses the Georgia Writing Assessment rubric to evaluate students' writing skills base on 5 levels: Not Meeting (10-12); Borderline Meeting (27-40); Borderline Exceeding (41-43) and Exceeding (44-50).

To increase inter-rater-reliability, 2 scorers assess each essay in the areas of Ideas, Organization, Style, and Convention. A total score (that adds both scores) is calculated ranging from 10-50. The assessment materials include: persuasive writing prompt, testing directions, and an answer folder (pre-writing pages, drafting pages, and final draft page). Only students' final drafts are submitted for scoring. The turn- around time is usually 4-6 weeks

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Appendix C: Aligning Curriculum and Assessment Tool

Session I – Aligning Curriculum & Assessment
Ensuring Content & Construct Validity

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Appendix D: SLO Table of Specifications

SLO TABLE OF SPECIFICATIONS A

The purpose of this table is to detail the content, level of cognitive demand, and emphases of the standard and correlating assessment items/or tasks.

1. Enter the standard and a short description of the standard in the "Standard" column (e.g., ELA8R1.b Analyzes character traits).
2. Indicate the significance of the standard/or content in the course in the "Emphasis" column (e.g., High, Medium, or Low). To determine emphasis, consider the amount of instructional time devoted to the content (possibly reference the course scope and sequence, instructional calendar, or other curriculum mapping).
3. Specify the type of item in the column entitled "Item Type" (e.g., MC - multiple choice, SR - short response, E – essay, or PT – performance task).
4. Determine the level of cognitive demand required of the student to perform the skill or demonstrate the knowledge described by the standard (e.g., Bloom's – Analyze, DOK – Level 2) and ensure the item is at or above the cognitive level of the standard.
5. Provide the answer and/or point value of the item or task.
6. After test administration, use performance results to conduct an item analysis and determine next steps.

Subject: Third Grade Reading **Course:** 23.0014 **Grade:** Third (3)

Test Title: 3rd Grade Reading Post-Test **TOS Date:** 2/3/12 **District:** Sample

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SLO TABLE OF SPECIFICATIONS A

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1. Enter the standard and a short description of the standard in the "Standard" column (e.g., ELA8R1.b Analyzes character traits).
2. Indicate the significance of the standard/or content in the course in the "Emphasis" column (e.g., High, Medium, or Low). To determine emphasis, consider the amount of instructional time devoted to the content (possibly reference the course scope and sequence, instructional calendar, or other curriculum mapping).
3. Specify the type of item in the column entitled "Item Type" (e.g., MC - multiple choice, SR - short response, E – essay, or PT – performance task).
4. Determine the level of cognitive demand required of the student to perform the skill or demonstrate the knowledge described by the standard (e.g., Bloom's – Analyze, DOK – Level 2) and ensure the item is at or above the cognitive level of the standard.
5. Provide the answer and/or point value of the item or task.
6. After test administration, use performance results to conduct an item analysis and determine next steps.

Item	Standard	Course Emphasis	Item Type	Standard: Cognitive Demand	Item: Cognitive Demand	Answer or Point Value	# or % Incorrect	# or % correct	Analysis/Next Steps
1	**ELACC3RI1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	L	MC	Bloom's: Level 2: Understanding DOK: Level 1 Recall/Repro.	Bloom's: Level 2: Understanding DOK: Level 1 Recall/Repro	D	80%	20%	Majority 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	**ELACC3RI2:** Determine the main idea of a text; recount the key details and explain how they support the main idea	M	SR	Bloom's: Level 2 Understanding DOK: Level 2 Skill/Concept Level 3 (explain *how*…)	Bloom's: Level 2 Understanding DOK Level 3 Strategic Thinking	2	30%	70%	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.

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SLE Work Sample

Georgia Department of Education
Student Learning Objectives Manual

Subject: _____ **Course:** _____ **Grade:** _____

Test Title: _____ **TOS Date:** _____ **District:** _____

Item	Standard	Course Emphasis	Item Type	Standard: Cognitive Demand	Item: Cognitive Demand	Answer	# or % Incorrect	# or % correct	Analysis/Next Steps
1				Bloom's: DOK:	Bloom's: DOK:				
2				Bloom's: DOK:	Bloom's: DOK:				
3				Bloom's: DOK:	Bloom's: DOK:				
4				Bloom's: DOK:	Bloom's: DOK:				
5				Bloom's: DOK:	Bloom's: DOK:				
6				Bloom's: DOK:	Bloom's: DOK:				
7				Bloom's: DOK:	Bloom's: DOK:				
8				Bloom's: DOK:	Bloom's: DOK:				

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9				Bloom's: DOK:	Bloom's: DOK:					
10				Bloom's: DOK:	Bloom's: DOK:					
11				Bloom's: DOK:	Bloom's: DOK:					
12				Bloom's: DOK:	Bloom's: DOK:					
13				Bloom's: DOK:	Bloom's: DOK:					
14				Bloom's: DOK:	Bloom's: DOK:					
15				Bloom's: DOK:	Bloom's: DOK:					
16				Bloom's: DOK:	Bloom's: DOK:					
17				Bloom's: DOK:	Bloom's: DOK:					
18				Bloom's: DOK:	Bloom's: DOK:					

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19				Bloom's: DOK:	Bloom's: DOK:					
20				Bloom's: DOK:	Bloom's: DOK:					
21				Bloom's: DOK:	Bloom's: DOK:					
22				Bloom's: DOK:	Bloom's: DOK:					
23				Bloom's: DOK:	Bloom's: DOK:					
24				Bloom's: DOK:	Bloom's: DOK:					
25				Bloom's: DOK:	Bloom's: DOK:					
26				Bloom's: DOK:	Bloom's: DOK:					
27				Bloom's: DOK:	Bloom's: DOK:					
28				Bloom's: DOK:	Bloom's: DOK:					

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29				Bloom's: DOK:	Bloom's: DOK:					
30				Bloom's: DOK:	Bloom's: DOK:					
31				Bloom's: DOK:	Bloom's: DOK:					
32				Bloom's: DOK:	Bloom's: DOK:					
33				Bloom's: DOK:	Bloom's: DOK:					
34				Bloom's: DOK:	Bloom's: DOK:					
35				Bloom's: DOK:	Bloom's: DOK:					
36				Bloom's: DOK:	Bloom's: DOK:					
37				Bloom's: DOK:	Bloom's: DOK:					
38				Bloom's: DOK:	Bloom's: DOK:					

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39				Bloom's: DOK:	Bloom's: DOK:					
40				Bloom's: DOK:	Bloom's: DOK:					
41				Bloom's: DOK:	Bloom's: DOK:					
42				Bloom's: DOK:	Bloom's: DOK:					
43				Bloom's: DOK:	Bloom's: DOK:					
44				Bloom's: DOK:	Bloom's: DOK:					
45				Bloom's: DOK:	Bloom's: DOK:					

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Appendix E: Depth of Knowledge

Depth-of-Knowledge Definitions
Norman L. Webb
University of Wisconsin-Madison
Wisconsin Center for Education Research
January 16, 2008

Reading DOK Levels

In language arts, four DOK levels were used to judge both reading and writing objectives and assessment tasks. The reading levels are based on Valencia and Wixson (2000, pp. 909-935). The writing levels were developed by Marshá Horton, Sharon O'Neal, and Phoebe Winter.

Reading Level 1. Level 1 requires students to receive or recite facts or to use simple skills or abilities. Oral reading that does not include analysis of the text, as well as basic comprehension of a text, is included. Items require only a shallow understanding of the text presented and often consist of verbatim recall from text, slight paraphrasing of specific details from the text, or simple understanding of a single word or phrase. Some examples that represent, but do not constitute all of, Level 1 performance are:

Support ideas by reference to verbatim or only slightly paraphrased details from the text.
Use a dictionary to find the meanings of words.
Recognize figurative language in a reading passage.

Reading Level 2. Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of text or portions of text. Inter-sentence analysis of inference is required. Some important concepts are covered, but not in a complex way. Standards and items at this level may include words such as summarize, interpret, infer, classify, organize, collect, display, compare, and determine whether fact or opinion. Literal main ideas are stressed. A Level 2 assessment item may require students to apply skills and concepts that are covered in Level 1. However, items require closer understanding of text, possibly through the item's paraphrasing of both the question and the answer. Some examples that represent, but do not constitute all of, Level 2 performance are:

Use context cues to identify the meaning of unfamiliar words, phrases, and expressions that could otherwise have multiple meanings.
Predict a logical outcome based on information in a reading selection.
Identify and summarize the major events in a narrative.

Reading Level 3. Deep knowledge becomes a greater focus at Level 3. Students are encouraged to go beyond the text; however, they are still required to show understanding of the ideas in the text. Students may be encouraged to explain, generalize, or connect ideas. Standards and items at Level 3 involve reasoning and planning. Students must be able to support their thinking. Items may involve abstract theme identification, inference across an entire passage, or students' application of prior knowledge. Items may also involve more superficial connections between texts. Some examples that represent, but do not constitute all of, Level 3 performance are:

Explain or recognize how the author's purpose affects the interpretation of a reading selection.
Summarize information from multiple sources to address a specific topic.
Analyze and describe the characteristics of various types of literature.

Reading Level 4. Higher-order thinking is central and knowledge is deep at Level 4. The standard or assessment item at this level will probably be an extended activity, with extended time provided for completing it. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require the application of significant conceptual understanding and higher-order thinking. Students take information from at least one passage of a text and are asked to apply this information to a new task. They may also be asked to develop hypotheses and perform complex analyses of the connections among texts. Some examples that represent, but do not constitute all of, Level 4 performance are:

Analyze and synthesize information from multiple sources.
Examine and explain alternative perspectives across a variety of sources.
Describe and illustrate how common themes are found across texts from different cultures.

Writing DOK Levels

Writing Level 1. Level 1 requires the student to write or recite simple facts. The focus of this writing or recitation is not on complex synthesis or analysis, but on basic ideas. The students are asked to list ideas or words, as in a brainstorming activity, prior to written composition; are engaged in a simple spelling or vocabulary assessment; or are asked to write simple sentences. Students are expected to write, speak, and edit using the conventions of Standard English. This includes using appropriate grammar, punctuation, capitalization, and spelling. Students demonstrate a basic understanding and appropriate use of such reference materials as a dictionary, thesaurus, or Web site. Some examples that represent, but do not constitute all of, Level 1 performance are:

Use punctuation marks correctly.
Identify Standard English grammatical structures, including the correct use of verb tenses.

Writing Level 2. Level 2 requires some mental processing. At this level, students are engaged in first-draft writing or brief extemporaneous speaking for a limited number of purposes and audiences. Students are expected to begin connecting ideas, using a simple organizational structure. For example, students may be engaged in note-taking, outlining, or simple summaries. Text may be limited to one paragraph. Some examples that represent, but do not constitute all of, Level 2 performance are:

Construct or edit compound or complex sentences, with attention to correct use of phrases and clauses.
Use simple organizational strategies to structure written work.
Write summaries that contain the main idea of the reading selection and pertinent details.

Writing Level 3. Level 3 requires some higher-level mental processing. Students are engaged in developing compositions that include multiple paragraphs. These compositions may include complex sentence structure and may demonstrate some synthesis and analysis. Students show awareness of their audience and purpose through focus, organization, and the use of appropriate compositional elements. The use of appropriate compositional elements includes such things as addressing chronological order in a narrative, or including supporting facts and details in an informational report. At this stage, students are engaged in editing and revising to improve the quality of the composition. Some examples that represent, but do not constitute all of, Level 3 performance are:

Support ideas with details and examples.
Use voice appropriate to the purpose and audience.
Edit writing to produce a logical progression of ideas.

Writing Level 4. Higher-level thinking is central to Level 4. The standard at this level is a multi-paragraph composition that demonstrates the ability to synthesize and analyze complex ideas or themes. There is evidence of a deep awareness of purpose and audience. For example, informational papers include hypotheses and supporting evidence. Students are expected to create compositions that demonstrate a distinct voice and that stimulate the reader or listener to consider new perspectives on the addressed ideas and themes. An example that represents, but does not constitute all of, Level 4 performance is:

Write an analysis of two selections, identifying the common theme and generating a purpose that is appropriate for both.

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Student Learning Objectives Manual
Depth-of-Knowledge Definitions
University of Wisconsin-Madison
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Mathematics DOK Levels

Level 1 (Recall) includes the recall of information such as a fact, definition, term, or a simple procedure, as well as performing a simple algorithm or applying a formula. That is, in mathematics, a one-step, well-defined, and straight algorithmic procedure should be included at this lowest level. Other key words that signify Level 1 include "identify," "recall," "recognize," "use," and "measure." Verbs such as "describe" and "explain" could be classified at different levels, depending on what is to be described and explained.

Level 2 (Skill/Concept) includes the engagement of some mental processing beyond an habitual response. A Level 2 assessment item requires students to make some decisions as to how to approach the problem or activity, whereas Level 1 requires students to demonstrate a rote response, perform a well-known algorithm, follow a set procedure (like a recipe), or perform a clearly defined series of steps. Keywords that generally distinguish a Level 2 item include "classify," "organize," "estimate," "make observations," "collect and display data," and "compare data." These actions imply more than one step. For example, to compare data requires first identifying characteristics of objects or phenomena and then grouping or ordering the objects. Some action verbs, such as "explain," "describe," or "interpret," could be classified at different levels depending on the object of the action. For example, interpreting information from a simple graph, or reading information from the graph, also are at Level 2. Interpreting information from a complex graph that requires some decisions on what features of the graph need to be considered and how information from the graph can be aggregated is at Level 3. Level 2 activities are not limited only to number skills, but may involve visualization skills and probability skills. Other Level 2 activities include noticing or describing non-trivial patterns, explaining the purpose and use of experimental procedures; carrying out experimental procedures; making observations and collecting data; classifying, organizing, and comparing data; and organizing and displaying data in tables, graphs, and charts.

Level 3 (Strategic Thinking) requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels. In most instances, requiring students to explain their thinking is at Level 3. Activities that require students to make conjectures are also at this level. The cognitive demands at Level 3 are complex and abstract. The complexity does not result from the fact that there are multiple answers, a possibility for both Levels 1 and 2, but because the task requires more demanding reasoning. An activity, however, that has more than one possible answer and requires students to justify the response they give would most likely be at Level 3. Other Level 3 activities include drawing conclusions from observations; citing evidence and developing a logical argument for concepts; explaining phenomena in terms of concepts; and deciding which concepts to apply in order to solve a complex problem.

Level 4 (Extended Thinking) requires complex reasoning, planning, developing, and thinking, most likely over an extended period of time. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. For example, if a student has to take the water temperature from a river each day for a month and then construct a graph, this would be classified as a Level 2. However, if the student is to conduct a river study that requires taking into consideration a number of variables, this would be a Level 4. At Level 4, the cognitive demands of the task should be high and the work should be very complex. Students should be required to make several connections—relate ideas *within* the content area or *among* content areas—and have to select one approach among many alternatives on how the situation should be solved, in order to be at this highest level. Level 4 activities include designing *and* conducting experiments and projects; developing and proving conjectures, making connections between a finding and related concepts and phenomena; combining and synthesizing ideas into new concepts; and critiquing experimental designs.

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Levels of Depth-of-Knowledge for Science

Interpreting and assigning depth-of-knowledge levels to objectives both within standards and assessment items is an essential requirement of alignment analysis. Four levels of depth of knowledge are used for this analysis. Because the highest (fourth) DOK level is rare or even absent in most standardized assessments, reviewers usually will be making distinctions among DOK levels 1, 2 and 3. Please note that, in science, "knowledge" can refer both to content knowledge and knowledge of science processes. This meaning of knowledge is consistent with the National Science Education Standards (NSES), which terms "Science as Inquiry" as its first Content Standard. The science levels were developed with the help of Edward Britton and Gwen Pollock.

Level 1. Recall and Reproduction

Level 1 is the recall of information such as a fact, definition, term, or a simple procedure, as well as performing a simple science process or procedure. Level 1 only requires students to demonstrate a rote response, use a well-known formula, follow a set procedure (like a recipe), or perform a clearly defined series of steps. A "simple" procedure is well-defined and typically involves only one-step. Verbs such as "identify," "recall," "recognize," "use," "calculate," and "measure" generally represent cognitive work at the recall and reproduction level. Simple word problems that can be directly translated into and solved by a formula are considered Level 1. Verbs such as "describe" and "explain" could be classified at different DOK levels, depending on the complexity of what is to be described and explained.

A student answering a Level 1 item either knows the answer or does not: that is, the answer does not need to be "figured out" or "solved." In other words, if the knowledge necessary to answer an item automatically provides the answer to the item, then the item is at Level 1. If the knowledge necessary to answer the item does not automatically provide the answer, the item is at least at Level 2. Some examples that represent but do not constitute all of Level 1 performance are:

Recall or recognize a fact, term, or property.
Represent in words or diagrams a scientific concept or relationship.
Provide or recognize a standard scientific representation for simple phenomenon.
Perform a routine procedure such as measuring length.

Level 2. Skills and Concepts

Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response. The content knowledge or process involved is more complex than in level 1. Items require students to make some decisions as to how to approach the question or problem.

Keywords that generally distinguish a Level 2 item include "classify," "organize," "estimate," "make observations," "collect and display data," and "compare data." These actions imply more than one step. For example, to compare data requires first identifying characteristics of the objects or phenomenon and then grouping or ordering the objects. Level 2 activities include making observations and collecting data; classifying, organizing, and comparing data; and organizing and displaying data in tables, graphs, and charts.

Some action verbs, such as "explain," "describe," or "interpret," could be classified at different DOK levels, depending on the complexity of the action. For example, interpreting information from a simple graph, requiring reading information from the graph, is a Level 2. An item that requires interpretation from a complex graph, such as making decisions regarding features of the graph that need to be considered and how information from the graph can be aggregated, is at Level 3. Some examples that represent, but do not constitute all of Level 2 performance, are:

Specify and explain the relationship between facts, terms, properties, or variables.
Describe and explain examples and non-examples of science concepts.
Select a procedure according to specified criteria and perform it.
Formulate a routine problem given data and conditions.
Organize, represent and interpret data.

Level 3. Strategic Thinking

Level 3 requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels. The cognitive demands at Level 3 are complex and abstract. The complexity does not result only from the fact that there could be multiple answers, a possibility for both Levels 1 and 2, but because the multi-step task requires more demanding reasoning. In most instances, requiring students to explain their thinking is at Level 3; requiring a very simple explanation or a word or two should be at Level 2. An activity that has more than one possible answer and requires students to justify the response they give would most likely be a Level 3. Experimental designs in Level 3 typically involve more than one dependent variable. Other Level 3 activities include drawing conclusions from observations; citing evidence and developing a logical argument for concepts; explaining phenomena in terms of concepts; and using concepts to solve non-routine problems. Some examples that represent, but do not constitute all of Level 3 performance, are:

Identify research questions and design investigations for a scientific problem.
Solve non-routine problems.
Develop a scientific model for a complex situation.
Form conclusions from experimental data.

Level 4. Extended Thinking

Tasks at Level 4 have high cognitive demands and are very complex. Students are required to make several connections—relate ideas *within* the content area or *among* content areas—and have to select or devise one approach among many alternatives on how the situation can be solved. Many on-demand assessment instruments will not include any assessment activities that could be classified as Level 4. However, standards, goals, and objectives can be stated in such a way as to expect students to perform extended thinking. "Develop generalizations of the results obtained and the strategies used and apply them to new problem situations," is an example of a Grade 8 objective that is a Level 4. Many, but not all, performance assessments and open-ended assessment activities requiring significant thought will be Level 4.

Level 4 requires complex reasoning, experimental design and planning, and probably will require an extended period of time either for the science investigation required by an objective, or for carrying out the multiple steps of an assessment item. However, the extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. For example, if a student has to take the water temperature from a river each day for a month and then construct a graph, this would be classified as a Level 2 activity. However, if the student conducts a river study that requires taking into consideration a number of variables, this would be a Level 4. Some examples that represent but do not constitute all of a Level 4 performance are:

Based on provided data from a complex experiment that is novel to the student, deduct the fundamental relationship between several controlled variables.
Conduct an investigation, from specifying a problem to designing and carrying out an experiment, to analyzing its data and forming conclusions.

Social Studies Depth-of-Knowledge Definitions
Four levels of depth of knowledge were used for this analysis. Because the highest (fourth) level is rare or even absent in most standardized assessments, reviewers usually made distinctions among DOK levels 1, 2 and 3. The social studies levels were developed by Ann Prewitt and Fred Czarra.

Level 1 Recall of Information
Level 1 asks students to recall facts, terms, concepts, trends, generalizations and theories or to recognize or identify specific information contained in graphics. This level generally requires students to identify, list, or define. The items at this level usually ask the student to recall who, what, when and where. Items that require students to "describe" and "explain" could be classified at Level 1 or 2 depending on what is to be described and explained. A Level 1 "describe or explain" would recall, recite or reproduce information. Items that require students to recognize or identify specific information contained in maps, charts, tables, graphs or drawings are generally level 1.

Level 2 Basic Reasoning

Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response. This level generally requires students to contrast or compare people, places, events and concepts; convert information from one form to another; classify or sort items into meaningful categories; describe or explain issues and problems, patterns, cause and effect, significance or impact, relationships, points of view or processes. A Level 2 "describe or explain" would require students to go beyond a description or explanation of recalled information to describe or explain a result or "how" or "why."

Level 3 Application

Level 3 requires reasoning, using evidence, and a higher level of thinking than the previous two levels. Students would go beyond knowing "how and why" to justifying the "how and why" through application and evidence. The cognitive demands at Level 3 are more complex and more abstract than Levels 1 or 2. Items at Level 3 include drawing conclusions; citing evidence; using concepts to explain "how and why;" using concepts to solve problems; analyzing similarities and differences in issues and problems; proposing and evaluating solutions to problems; recognizing and explaining misconceptions or making connections across time and place to explain a concept or big idea.

Level 4 Extended Reasoning

Level 4 requires even more complex reasoning and the addition of planning, investigating, or developing that will most likely require an extended period of time. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying

significant conceptual understanding and higher-order thinking. At this level the cognitive demands should be high and the work should be very complex. Students should be required to connect and relate ideas and concepts *within* the content area or *among* content areas in order to be at this highest level. The distinguishing factor for Level 4 would be evidence through a task or product that the cognitive demands have been met. A Level 4 performance will require students to analyze and synthesize information from multiple sources, examine and explain alternative perspectives across a variety of sources and/or describe and illustrate how common themes and concepts are found across time and place. In some Level 4 performance students will make predictions with evidence as support, develop a logical argument, or plan and develop solutions to problems.

Many on-demand assessment instruments will not include assessment activities that could be classified as Level 4. However, standards, goals, and objectives can be stated so as to expect students to perform thinking at this level. On-demand assessments that do include tasks, products, or extended responses would be classified as Level 4 when the task or response requires evidence that the cognitive requirements have been met.

References

Valencia, S. W., & Wixson, K. K. (2000). Policy-oriented research on literary standards and assessment. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Vol. III.* Mahwah, NJ: Lawrence Erlbaum.

Appendix F: SLO Assessment Criteria Table

SLO ASSESSMENT CRITERIA TABLE
for the Development & Evaluation of Quality Assessments

Subject: _____ **Course:** _____ **Grade(s):** _____

Test Title: _____ **District(s):** _____ **Date:** _____

I. Test 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 (e.g., numerical, alphabetical, sensible). 9. Avoid clues in the answer choices. 10. Ensure correct response is the only correct response. 11. Arrange items for easy to more difficult.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Test meets 10 or 11 of the 11 select-response item criteria.	Test meets 8 or 9 of the 11 select-response item criteria.	Test meets 6 or 7 of the 11 select-response item criteria.	Test meets 5 or less of the 11 select-response item criteria.	
Supply-Response Items (Short Answer, Essay, etc.) 1. Question stem is clear. 2. Scoring rubric is included. 3. Adequate space for response is provided.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Question or prompt is written to utilize higher-order thinking at DOK Levels 3-4 and elicit a unique response. The rubric clearly delineates the expectation of the response.	Question or prompt is written to elicit the appropriate response. The rubric provides general expectations of the response.	Question or prompt is too broad or too narrow to elicit the intended response. The rubric minimally provides expectations of the response.	Question or prompt is unclear and invites a wide range of responses. The rubric does not provide clear expectations of the response.	
Performance Tasks (Student-created answers or products)	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐

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1. The task is clear and is detailed enough to provide students with an understanding of the expectations (e.g., purpose, product, process, required/suggested resources, time, due dates, presentation format, etc.). 2. Student product and/or performance will sufficiently illustrate student attainment of outcomes. 3. A scoring rubric or evaluative criteria document is included and plainly outlines observable and measurable indicators of the task. 4. A student checklist that is aligned to the evaluative criteria is provided to support student performance and self-monitoring of progress.	The task clearly relates to the intended outcome(s) and indicator(s) to be assessed. The task is written to promote higher-order thinking at DOK Levels 3-4. The rubric clearly delineates the expectation of the response.	The task relates to the intended outcomes or indicators. The task is written to elicit the appropriate student response or product. However, the rubric provides general expectations of the response.	The task relates to the intended outcomes or indicators. However, the task is too broad or too narrow to elicit the intended student response or product. The rubric minimally provides expectations of the response.	The task does not relate to the intended outcomes and indicators. The task is unclear and invites a wide range of student responses or products. The rubric does not provide clear expectations of the response.	

Rubric Development (*If applicable)* 1. The rubric type is appropriately matched to the assessment. 2. The levels of performance are clearly identified. 3. Each level of performance is appropriately and adequately described taking into account the critical elements of the task. 4. Point values are assigned to each performance level.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Rubric meets 4 of the 4 criteria.	Rubric meets 3 of the 4 criteria.	Rubric meets 2 of the 4 criteria.	Rubric meets less than 2 of the 4 criteria.	
Formatting 1. All parts of a test question are presented on a single page. 2. The number of items on the test is appropriate for the developmental level of the students. 3. The testing period is the appropriate length for the developmental level of the students. 4. The test is visually easy to read. The graphics, charts, and pictures support test content appropriately. 5. There is consistency in the presentation of item types. 6. All directions are stated clearly and explicitly. 7. If applicable, state the point value of each item type or task.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Test meets 6 of the 6 formatting criteria. *If point values are applicable, test meets 7 of the 7 formatting criteria*	Test meets 5 of the 6 formatting criteria. *If point values are applicable, test meets 6 of the 7 formatting criteria*	Test meets 4 of the 6 formatting criteria. *If point values are applicable, test meets 5 of the 7 formatting criteria*	Test meets 3 or less of the 6 formatting criteria. *If point values are applicable, test meets 4 of the 7 formatting criteria*	
Test and Item Bias	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐

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The wide range of student experiences and exposure is honored and acknowledged. The test is not biased or offensive with regard to race, gender, native language, ethnicity, geographic region or other factors.	The test and/or items do not contain any words or phrases that would put any student at a disadvantage.	The test may contain words or phrases that could be considered biased or offensive with regard to race, gender, native language, ethnicity, geographic region or other factors.	The test is biased or offensive with regard to race, gender, native language, ethnicity, geographic region or other factors.	The test is biased and offensive with regard to race, gender, native language, ethnicity, geographic region or other factors.	
Section I Test Construction Comments:					

II. Test Validity and Reliability					
Content Validity The test questions sufficiently represent the skills in the specified subject area and adequately assess the skills in the specified standard. (Research indicates that 6 or more items per domain/strand or standard, where appropriate, should be included depending upon the instructional emphasis or weight of the standard in the course.) *Consider the following question(s) in determining content validity.* • Does this test measure what it is intended to measure? • Does the assessment adequately sample the intended learning outcomes? • Are there items on the assessment with no intended learning outcomes?	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	The test adequately samples the intended standards or objectives, and it *does not* assess any learning outcomes that were not intended nor taught.	The test samples the majority of the intended standards or objectives, and it *does not* assess any learning outcomes that were not intended nor taught.	The test inadequately samples the intended standards or objectives.	The test does not sample the intended standards or objectives.	
Construct Validity Use of the SLO Table of Specifications is evident and reflects a clear alignment between Categorical Concurrence (extent to which the items or performance tasks cover the standards, six items or one performance task per domain/strand or standard, where appropriate), Depth of Knowledge (cognitive processing required by each item or performance task compared to the requirements implied by the content objectives), and Range of Knowledge (alignment of items to the multiple objectives within a standard; at least 50% of the standard's objectives must be matched to one or more items or tasks).	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	There is a balanced representation of the content objectives/ cognitive levels, with at least 50% of the test items at or above the standards'	There is a balanced representation of the cognitive objectives/ cognitive levels, with at least 40% of the test items at or above	There is an unbalanced representation of the content objectives/ cognitive levels, with 30% or less of the test items at or above the standards' respective DOK	There is not a balanced representation of the content objectives/ cognitive levels. Most of the test items fall below the standards' respective DOK levels and	

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Consider the following question(s) in determining construct validity: • Does the assessment have a sufficient number of items or performance tasks to target each standard to be assessed? • Is the assessment comprised of items that correspond to at least 50% of each standard's objectives (or elements)? Items should assess multiple objectives where possible. • Can logical inferences be made about students' knowledge and/or skills in the course from the assessment?	respective DOK levels and objectives.	the standards' respective DOK levels and objectives.	levels and objectives.	objectives.	
Reliability Six or more test questions or items are included for each domain/strand or standard, where appropriate, (depending upon the instructional time spent or the weight) to reduce the unintended effects of error on the assessment results. *Consider the following question(s) in determining reliability.* • Are there enough questions for each domain or strand assessed? • Is the test length appropriate? Does the test length reduce measurement error and support reliability? • Does the assessment provide for student-specific factors (e.g., fatigue, guessing, marking errors), test-specific factors (e.g., ambiguous items, poor directions), scoring-specific factors (e.g., non-uniform scoring guidelines, computation errors)? • Are the questions, directions, and formatting on the assessment free from systematic error? • Are the grading criteria objective?	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	An adequate number of items are included, the test is free from systematic error, **and** the grading criteria are objective.	An adequate number of items are included, and the test is free from systematic error **or** the grading criteria are objective.	An adequate number of items are included, **but** the test is subject to systematic error and/or the grading criteria are not objective.	There are an inadequate number of items, the test is subject to systematic error, **and** the grading criteria are not objective.	

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Section II Test Validity & Reliability Comments:

III. Test Administration Procedures

Test Administration Plan The plan provides detailed and clear instructions that outline appropriate test administration procedures to include the following: 1. Specifications for proper identification and training of testing coordinators and proctors 2. Clearly communicated test administration procedures 3. Clearly outlined time length and testing accommodations 4. Provisions for a script (where appropriate) 5. Adequate access to the appropriate test materials and testing tools for all test participants 6. Clearly communicated test scoring procedures 7. Provisions for inter-rater reliability training (where appropriate)	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Clear guidelines for test security are provided. Test administration guidelines meet 7 out of the 7 test administration criteria.	This category is not applicable as the assessment must meet 7 out of 7 for test administration criteria. **The assessment cannot move forward.**	This category is not applicable as the assessment must meet 7 out of 7 for test administration criteria. **The assessment cannot move forward.**	This category is not applicable as the assessment must meet 7 out of 7 for test administration criteria. **The assessment cannot move forward**.	

Section III Test Administration Comments:

IV. Test Reporting

Detailed and clear test reporting procedures are provided. 1. The proficiency criteria for the SLO are clearly communicated. 2. The time between test 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.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Test reporting guidelines meet 5 of the 5 test reporting criteria.	Test reporting guidelines meet 4 of the 5 test reporting criteria.	Test reporting guidelines meet 3 of the 5 test reporting criteria.	Test reporting guidelines meet two or less of the test reporting criteria.	

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Section IV Test Reporting Comments:

V. Post-Administration (Test Reliability)					
Item Analysis Item analysis was conducted to improve the effectiveness of test items and the validity of test scores. Items were critiqued to determine revision or removal from item bank.	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	Item analysis was conducted and items were critiqued resulting in the revision or removal of test items, if appropriate.	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. *Consider the following question(s) in determining reliability.* • Do the items discriminate between students with different degrees of mastery: Did the "higher performing" students tend to answer the item correctly while the "lower performing" students responded incorrectly? • Did each item distinguish between those who have learned the standard/or objective and those who have not? • Are test scores free of errors of measurement due to things like student fatigue, item sampling, student guessing? • Do the results reflect the intended learning outcomes?	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐
	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 test contained several grammatical or mechanical mistakes.	
Data Use Items are diagnostic and/or conclusive in nature,	**3**☐	**2**☐	**1**☐	**0**☐	**Not Applicable** ☐

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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 performance of the standard and to prescribe appropriate remediation and inform future test construction. (modified statement)	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.	
Section V Post Administration Comments:					

Rating Summary

Rating	Point Value	# of Criteria Rated at that Level	Computation
Evident	3	_____	3 X _____ = _____
Somewhat Evident	2	_____	2 X _____ = _____
Minimal Evidence	1	_____	1 X _____ = _____
Not Evident	0	_____	0 X _____ = _____
Add the products in the computation column to get the total score.			TOTAL = _____ out of 42

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Appendix G: District SLO Form

	SLO GENERAL INFORMATION	
A. District Name	GaDOE Public Domain SLO	
B. State Funded Course Number	Enter the state course number, not the local course number	
C. State Funded Course Title	Enter state course title	
D. Grade(s)	May be a single grade or grade range	
E. Pre-Assessment	☐ Commercially Developed ☒ Locally/Regionally Developed	
F. Pre-Assessment Window	To be determined by the district during a pre-selected assessment window made available by GaDOE, preferably during the first 30 calendar days of the year.	
G. Post-Assessment	☐ Commercially Developed ☒ Locally/Regionally Developed	
H. Post-Test Window	To be determined by the district during a pre-selected assessment window made available by GaDOE, preferably during the last 30 calendar days of the year.	
I. Collaboratively Developed	List assessment/SLO team members and position:	
J. Developed by GADOE Trained Assessment Team	☒ Yes	☐ No

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	SLO CONTEXT AND STATEMENT
1. Selected Standards	Enter the standard number and short description. Elements aren't necessary.
2. Pre and Post Assessment Indicate level of proficiency.	The (course name) Public Domain Post Assessment is a (name type of assessment) and is comprised of (number of items and/or tasks). It assesses students (content, skills, etc.). The proficiency criteria are as follows: Exceeds Proficiency Meets Proficiency Does Not Meet Proficiency The (course name) Public Domain Pre Assessment is a (name type of assessment) and is comprised of (number of items and/or tasks). It assesses students (content, skills, etc.). The proficiency criteria are as follows: Exceeds Proficiency Meets Proficiency Does Not Meet Proficiency **Note: proficiency criteria are usually set by the test creators.**
3. Baseline Data or Historical Data/Trends	***TBD by district. District will set growth targets based on relative course baseline data, which may include national, state, and/or district data and course grades among others.*** ***Suggestions: Consider trend data relative to the course. Include general and specific data (EOCT and AP data; course grades) to support rationale. The template provided below may be helpful in composing your data summary.*** **The course data (teacher observation, course grades, and classroom assessments) show that (Course Name) students struggle with the following concepts: …** **(Course) trend data (20.. to 20 ..) support … indicating that ___% of students did not meet …, while only___ % exceeded. (Course) trend**

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	data show that students continue to struggle with course concepts after transitioning to the next course: ___% …
4. SLO Statement	From August 2012 to April 2013, 100% of_____(student group) will improve their_____(skill/content areas) as measured by the_____(**assessment measure). Students will increase from their pre-assessment scores to these post-assessment scores on the_____(**assessment measure) as follows: ➢ Students scoring _____[pre-assessment level (grade, score, range, or rubric level)] will increase to _____[post-assessment level (grade, score, range, or rubric level)] or higher*; ➢ Students scoring _____[pre-assessment level (grade, score, range, or rubric level)] will increase to _____[post-assessment level (grade, score, range, or rubric level)] or higher*; ➢ Students scoring _____[pre-assessment level (grade, score, range, or rubric level)] will increase to _____[post-assessment level (grade, score, range, or rubric level)] or higher*; ➢ Students scoring _____[pre-assessment level (grade, score, range, or rubric level)] will maintain or increase by _____ [points (numerical, percentage, level)] or higher. Level 4 students who are at or within _____- [points (numerical, percentage, level)] of the ceiling will increase _____(can consider a growth target involving another task or concept or one addressing a more challenging concept). ***Note:** For tiers 1-3, students scoring at the ceiling or within _____[points (numerical, percentage, level)] of the ceiling must increase at least _____ [points (numerical, percentage, level)] to demonstrate measurable progress. **Note: The SLO instructional period may vary if the course is an annual or semester course. For example, a semester course might read August 2012 to December 2012.**
5. Strategies for Attaining Objective	☐ Required
	☐ Recommended
6. Mid-year Review	The mid-year review is a district and/or school-based decision. It is recommended that teachers review *formative and benchmark classroom and grade-level or content-area data to monitor student progress.* Consider collaborative teacher data review within the content area and across grade-levels where appropriate.

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Appendix H: Teacher SLO Form

Teacher Student Learning Objective (SLO) Form

Directions: This suggested form is a tool to assist teachers in meeting the student learning objective set by their district.

Teacher _____ **Course Title** _____ **Grade** ___ **Date(s) of pre assessment**_____ **Date(s) of post assessment** _____	
TI. Setting (Describe the population and special learning circumstances)	
T2. Content/Subject/Field Area (The area/topic addressed based on learner achievement, data analysis, or observational data)	
T3. Classroom Baseline Data (Results of pre assessment)	☐ *Data attached*

T4. Means for Attaining Objective (Strategies used to accomplish the objective)

Strategy	Evidence	Target Date

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T5. Mid-year or Mid-course Results	
T6. End-of-year Results	

☐ ***Appropriate Data Received***

Strategies used and data provided demonstrate appropriate Student Growth ☐ ***Yes*** ☐ ***No***

Student Learning Objective Evaluation Rubric

Exemplary (3 pts)	Proficient (2 pts)	Developing/Needs Improvement (1 pt)	Ineffective (0 pts)
The work of the teacher results in extraordinary student academic growth beyond expectations during the school year.	The work of the teacher results in acceptable, measurable, and appropriate student academic growth.	The work of the teacher results in student academic growth that does not meet the established standard and/or is not achieved with all populations taught by the teacher.	The work of the teacher does not result in acceptable student academic growth.
Greater than 50% of 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.	Greater than 80% of students met or exceeded the Student Learning Objective and no more than 20% did not meet the Student Learning Objective.	Greater than 50% of students met or exceeded the Student Learning Objective.	Fewer than 50% of students met or exceeded the Student Learning Objective.
☐	☐	☐	☐
Comments:			

Final Student Learning Objective Score ☐

Teacher's Signature _____ *Date* _____

Evaluator's Signature _____ *Date* _____

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Appendix I: Glossary

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Appendix J: Resources

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