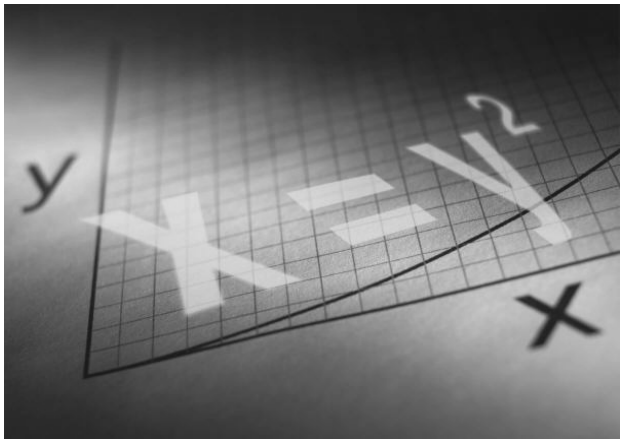
Florida EOC Assessments

Understanding Florida End-of-Course Assessment Scores

Spring 2011



Florida Department of Education

Office of Assessment
Florida Department of Education
325 West Gaines Street
Tallahassee, Florida 32399-0400

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Introduction

This booklet has been prepared to help you understand **Florida End-of-Course (EOC) Assessment** scores, in particular the 2011 Algebra 1 EOC Assessment scores. It includes explanations of the Florida EOC Assessments, EOC scores, and the ***Next Generation Sunshine State Standards*** **(NGSSS)** content assessed on the Algebra 1 EOC Assessment, as well as a glossary of the terms used in this document.

Note: Terms defined in the glossary are cross-referenced and appear in **bold text** the first time they are referenced within a paragraph.

Purpose of the Florida EOC Assessments

The Florida Department of Education (FDOE) is transitioning to **EOC assessments** for certain courses administered at the middle and high school levels. The **Florida EOC Assessments** are designed to measure student achievement of the **NGSSS** for specific courses, as outlined in their **course descriptions** (content knowledge and skills, as specified in the NGSSS **benchmarks**, taught in a course). These assessments are part of Florida's Next Generation Strategic Plan for increasing student achievement and improving college and career readiness. The first course to transition to EOC testing in Florida is Algebra 1. The schedule for implementing additional Florida EOC Assessments is posted at http://www.fldoe.org/asp/k12memo/pdf/tngcbtf.pdf. Course descriptions are posted at http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx.

Students will take the **EOC assessments** toward the completion of their coursework. Typically, each EOC assessment will be administered in the last three weeks of a course. During the first year of implementation, each EOC assessment will only be administered during the spring semester. After the first year of implementation, each EOC assessment will be administered at the conclusion of both the fall and spring semesters to accommodate courses that conclude at the end of each semester.

Students Tested in 2011

The Algebra 1 EOC Assessment was administered to all students enrolled in one of the following courses:

- Algebra 1 – 1200310
- Algebra 1 Honors – 1200320
- Algebra 1B – 1200380
- Pre-AICE Mathematics 1 – 1209810
- IB Middle Years Program – Algebra 1 Honors – 1200390

In addition, students who *completed* one of the above courses during the 2010-11 school year (e.g., a student in block scheduling who completed at the end of semester one) took the assessment.

Students tested include **English language learner (ELL)** and **exceptional student education (ESE)** students enrolled in the courses listed above. Administration accommodations are provided to eligible ELL and ESE students.

The Biology 1 EOC Assessment Field Test and the Geometry EOC Assessment Field Test were administered to students in grades 9-12 enrolled in Biology 1 or Geometry in districts with participating schools. These **field tests** were administered to collect information on test questions prior to their use in future test administrations. Student results are not reported for field tests.

Florida EOC Assessment Scores

Each time a new **EOC assessment** is administered for the first time (such as the 2011 Algebra 1 EOC Assessment), the reporting of student assessment results will be limited to scale scores, statewide **means**, and other **normative data**. Students will receive a score on a scale of 20-80 known as a **T-score scale**. On this scale, a score of 50 is at the

statewide average and the standard deviation is 10. Individual Student Reports (ISRs) will indicate whether the student's score falls within the high, middle, or low levels as compared to other students in Florida.

Course Grades

For the first statewide administrations of the Algebra 1, Geometry, and Biology 1 EOC Assessments, scores must be calculated as at least 30 percent of a student's final course grade if the student entered grade 9 during that school year. For the first statewide administration of the Civics EOC Assessment, scores must be calculated as at least 30 percent of the student's final course grade. U.S. History EOC Assessment scores must be calculated as at least 30 percent of a student's final course grade for each administration. Each school district must determine how EOC scores will be calculated into students' final course grades.

Algebra 1 EOC Assessment

The 2011 Algebra 1 EOC Assessment was administered statewide for the first time this year, after field testing in 2010. Each school district was asked to choose one week during a three-week testing window (May 9 – May 27, 2011), to administer the assessment; however, the testing window allowed for up to two consecutive weeks for testing within that timeframe to accommodate for **computer-based testing** needs.

Test Session
The Algebra 1 EOC Assessment is administered in one 160-minute session with a 10-minute break after the first 80 minutes. Although the assessment is scheduled for a 160-minute session, any student not finished by the end of the 160 minutes may continue working; however, testing must be completed within the same school day.

Testing Format
The Algebra 1 EOC Assessment is administered via a **computer-based testing** platform. Paper-based versions (regular print, large print, braille, and one-item-per-page) are provided for students with disabilities who require allowable accommodations, as specified in their **Individual Educational Plans (IEPs)** or **Section 504** plans.

Students may request the use of a hand-held four-function calculator after they participate in a practice test and determine that they are not comfortable using the online calculator for testing. Students are provided four-page, hard-copy work folders to use as scratch paper.

Question Formats
- **Multiple-choice questions**—Students choose the best answer from four answer choices.
- **Fill-in response questions**—Students solve a problem for which the answer is numerical. Students type or "fill-in" the digits 0-9 or the symbols for a decimal point, fraction bar, or negative sign in the answer boxes provided.

Each form of the assessment includes 35-40 **multiple-choice** and 25-30 **fill-in response** questions. Approximately six to 10 of these questions, which are also referred to as test **items**, are experimental (**field test**) questions and are NOT used to calculate student scores. Examples of each type of question format are provided on pages 11-12.

2011 Algebra 1 EOC Assessment Forms
There were three test forms of the Algebra 1 EOC Assessment in spring 2011. These forms are coded as Forms A, B, and C. Each form contained questions common to all three forms, as well as questions unique to each form and **field-test questions**. All three forms of the 2011 Algebra 1 EOC Assessment contained 54 questions that count toward student scores. Although the percentage of questions in each **reporting category** differs within a test form, each reporting category comprises the same percentage of students' final scores across test forms. The *Functions, Linear Equations, and Inequalities* reporting category is 55 percent, the *Polynomials* reporting category is 20 percent, and the *Rational, Radicals, Quadratics, and Discrete Mathematics* reporting category is 25 percent of students' final scores for all Algebra 1 EOC Assessment test forms. The test forms are designed this way to match the test design stipulated in the Test Design Summary posted at http://fcat.fldoe.org/pdf/designsummary.pdf.

During test construction, the three test forms were developed by experts using field-test statistics so that they would be comparable in difficulty. These three forms were then reviewed in 2010 by committees of mathematics educators who were trained in Dr. Norman Webb's alignment criteria prior to their review.[1] Committee members conducted a comprehensive review of the three test forms and determined that they are fair assessments aligned to the **course description**. The committees did not recommend any changes to the test forms.

[1] Information regarding Dr. Norman Webb's alignment criteria is available via the Web Alignment Tool (WAT) at http://wat.wceruw.org/index.aspx and the Adding Value to Mathematics and Science Partnership Evaluations website at http://facstaff.wcer.wisc.edu/normw/.

2011 Algebra 1 EOC Assessment Scores

For the 2011 Algebra 1 EOC Assessment, students receive a score on a scale of 20-80. This scale, which will only be used for the first statewide test administration of each EOC assessment, is a special scale known as a **T-score scale,** and the score that students receive is called a T score. On the T-score scale, a score of 50 is at the statewide average and all interpretations are norm-referenced interpretations. For example, on this scale, scores around 60 could be considered above average, and scores around 40 could be considered below average. Similarly, scores around 70 could be considered superior, and scores around 30 could be considered inferior. Individual Student Reports (ISRs) indicate whether the student's score falls within the high, middle, or low levels as compared to other students in Florida.

Algebra 1 Course Grades
For students who entered grade 9 in the 2010-11 school year and are enrolled in Algebra 1 or an equivalent course, the Algebra 1 EOC Assessment score must be used to calculate at least 30 percent of their final course grade. The method for applying this requirement will be determined and applied by each school district. Examples of possible strategies for assigning meaning to the Algebra 1 EOC Assessment **T scores** in order to calculate students' course grades are provided in the memorandum posted at http://fcat.fldoe.org/eoc/pdf/app11aeocasr.pdf.

Equating
Since there are three test forms, student results from all three test forms must be compared and, if necessary, adjusted to ensure that the difficulty level of the test is the same for each form. This process, called "**equating**," takes place after testing when enough student scores are in the system to ensure that a representative sample of student results is available for use in the comparison. Through the equating process, which places the statewide average, or **state mean,** at a score of 50 for all test forms combined, student scores across the three test forms are comparable. This means that even if the state mean for each test form or **content area** differs slightly across the three Algebra 1 EOC Assessment test forms, the equating process ensures that the interpretation or meaning of student **T scores** on the different test forms is the same.

Content Area Scores
Content area scores are the actual number of questions answered correctly within each **reporting category**. These scores are also known as raw scores. Reporting categories represent groups of similar student skills, or **benchmarks**, that are assessed within each subject area. The **state mean** for each reporting category is also provided on reports given to students, schools, and districts to allow for comparisons to average performance statewide. Although the percentage of questions in each **reporting category** differs within a test form, each reporting category comprises the same percentage of students' final scores across test forms. There are three reporting categories for the Algebra 1 EOC Assessment. The *Functions, Linear Equations, and Inequalities* reporting category is 55 percent, the *Polynomials* reporting category is 20 percent, and the *Rational, Radicals, Quadratics, and Discrete Mathematics* reporting category is 25 percent of students' final scores for all Algebra 1 EOC Assessment test forms. The content assessed by the Algebra 1 EOC Assessment is described on page 10.

It is important to identify the comparisons at the content-area-score level that yield valid interpretations of student performance so educators may gather reliable information from the Algebra 1 EOC Assessment. When comparing **content area scores**, it is important to keep in mind that there are three test forms. **Mean** content area scores for each test form might be different; therefore, content area scores should not be compared across test forms. The **equating** process described above only ensures that the **T scores** on the different test forms have the same meaning and are therefore comparable. The comparisons described in the following paragraphs can be applied in school- and district-level evaluations.

One valid comparison is of performance on a given **content area score** for a specific test form between schools, districts, and the state. For example, a school's content area score results for Form A can be compared to other schools', districts', or the state's content area score results for Form A. District results can be compared to other district results and state results for the same test form. Since students in any group (school, district, or state) will take the same set of test questions for the same test form in a given year, regardless of varying **item** difficulty at the content-area level, their results are comparable.

In Table 1 below, students in two schools (Sunshine and Evergreen) and students in the district (Coastal) can be compared to students in the state, based on their performance on the Algebra 1 EOC Assessment Form A, **Reporting Category** 1.

Table 1: Mean Percent Correct for the Algebra 1 EOC Assessment Form A, Reporting Category 1 2011 School Year (mock data)

Sunshine High School (mock data)	Evergreen High School (mock data)	Coastal District (mock data)	State of Florida (mock data)
48%	62%	64%	57%

In Table 2 below, 2011 mock results for Evergreen High School are compared to both the district (Coastal) and the state.

Table 2: Mean Percent Correct for the Algebra 1 EOC Assessment Form A, 2011 School Year Comparison of School to District and School to State (mock data)

Reporting Category	Evergreen High School (mock data)	Coastal District (mock data)	Difference (mock data)	Evergreen High School (mock data)	State of Florida (mock data)	Difference (mock data)
Reporting Category 1	62%	64%	-2%	62%	57%	5%
Reporting Category 2	64%	57%	7%	64%	63%	1%
Reporting Category 3	70%	72%	-2%	70%	64%	6%

This presentation of data provides another perspective of student performance and program effectiveness. For example, in **Reporting Category** 2, Evergreen High School had a higher **mean** percent correct statistic than the Coastal District on Form A (64 percent versus 57 percent, respectively); however, Evergreen High School's results were comparable to the state on Form A (64 percent versus 63 percent, respectively). If this variance remains consistent over time when comparing the same test form, there would be evidence to support identifying and sharing best practices at Evergreen High School with the rest of the district.

Another meaningful finding from Table 2 is illustrated in **Reporting Category** 3 results. In this **content area**, Evergreen High School had a slightly lower **mean** percent correct on Form A than Coastal District (70 percent versus 72 percent, respectively); however, this same statistic was higher than that of the state (70 percent versus 64 percent, respectively). It would be easy to miss the fact that, while Evergreen High School's performance on Reporting Category 3 was lower than that of the district, the performances of both were substantially higher than the state's. If this is the case for all three test forms, then it is likely that targeting additional resources to improve performance in Reporting Category 3 should be a lower priority.

Another type of valid comparison is the trend of any of the aforementioned comparisons (e.g., school to school, school to district); however, trend data for the Algebra 1 EOC Assessment will not be available until three test administrations have occurred.

The Florida Department of Education encourages educators to use Algebra 1 EOC Assessment results in any way that is statistically appropriate. The comparisons that have been described in this section provide possibilities for evaluation at the school and district levels.

Algebra 1 EOC Assessment Content

The content of the Algebra 1 EOC Assessment is organized by reporting categories that are used for test design, scoring, and reporting purposes. Reporting categories group the assessed student knowledge and skills, or **benchmarks**, into broad **content areas**.

Algebra 1 EOC Assessment Reporting Categories

The Algebra 1 EOC Assessment measures student achievement of the ***Next Generation Sunshine State Standards* (NGSSS)** in algebra, as outlined in the Algebra 1 **course description**. Forty NGSSS **benchmarks** comprise the Algebra 1 course description, which may be accessed at http://www.floridastandards.org/Courses/PublicPreviewCourse1.aspx. The test consists of **multiple-choice** and **fill-in response** questions that measure what students know and are able to do in the broad reporting categories listed below.

- **Functions, Linear Equations, and Inequalities**
  Students solve real-world problems involving relations and functions; interpret graphs, including the domain and range; use function notation and link equations to functions; and solve, graph, and interpret linear equations and inequalities.
- **Polynomials**
  Students perform operations on polynomials; and simplify monomial expressions and factor polynomial expressions.
- **Rationals, Radicals, Quadratics, and Discrete Mathematics**
  Students simplify rational and radical expressions; solve algebraic proportions; perform operations on radical expressions; interpret graphs of and solve quadratic equations; perform set operations; and use and interpret Venn diagrams.

Sample Algebra 1 EOC Assessment Test Questions

The *Algebra 1 End-of-Course Assessment Test Item Specifications*, which may be accessed at http://fcat.fldoe.org/eoc/itemspecs.asp, define the content and format of the assessment and the assessment's questions for **item** writers and reviewers, and indicate the alignment of questions with the **NGSSS**. A sample question for each Algebra 1 EOC Assessment **reporting category** and question format is provided below. These questions are located in the *Algebra 1 EOC Test Item Specifications* on pages 77, 81, and 94, respectively.

1. Sample Multiple-Choice Question

Russ bought 3 medium and 2 large submarine sandwiches for a total of $29.95. Stacy bought 4 medium and 1 large submarine sandwiches for a total of $28.45.

Which statement shows the cost of each medium and each large submarine sandwich?

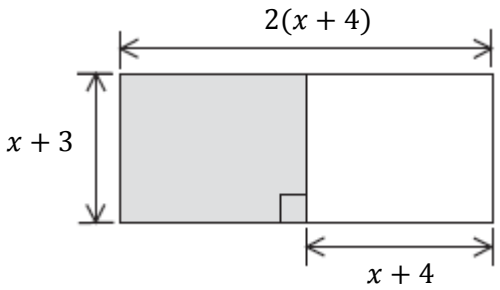
A. Each medium sandwich costs $5.69 and each large sandwich costs $6.89.
B. Each medium sandwich costs $5.69 and each large sandwich costs $6.39.
★ **C.** Each medium sandwich costs $5.39 and each large sandwich costs $6.89.
D. Each medium sandwich costs $5.39 and each large sandwich costs $6.39.

Reporting Category: Functions, Linear Equations, and Inequalities

Benchmark MA.912.A.3.14: Solve systems of linear equations and inequalities in two and three variables using graphical, substitution, and elimination methods.

2. Sample Multiple-Choice Question

Which expression is equivalent to the perimeter of the shaded portion of the rectangle?



A. $2x + 10$
B. $2x + 12$
★ **C.** $4x + 14$
D. $8x + 28$

Reporting Category: Polynomials

Benchmark MA.912.A.4.2: Add, subtract, and multiply polynomials.

3. Sample Fill-In Response Question

Set D lists the ages of Dianna's grandchildren.

$D = \{2, 5, 6, 8, 10, 11\}$

Set K lists the ages of Karen's grandchildren.

$K = \{2, 10, 18\}$

Set P lists the ages of Patrick's grandchildren.

$P = \{10, 11, 14\}$

What is the greatest age in the set $(K \cup P) \cap D$?

1	**1**					

Sample Response: 11

Reporting Category: Rationals, Radicals, Quadratics, and Discrete Mathematics

Benchmark MA.912.D.7.1: Perform set operations such as union and intersection, complement, and cross product.

Computer-Based Testing

The **Florida EOC Assessments** are administered on the computer as part of Florida's commitment to moving to **computer-based testing** for statewide assessments. Ultimately, computer-based testing is a more cost-efficient and environmentally friendly method for test delivery. In addition, computer-based testing provides the ability to test students later in the school year because less time is required for the scoring and reporting processes.

Practice Tests
Prior to taking the Algebra 1 EOC Assessment, students are required to participate in a practice test session at their school in order to become familiar with the testing tools and platform. **Computer-based practice tests**, called **Electronic Practice Assessment Tools (ePATs)**, are also provided online at www.FLAssessments.com/ePAT. Currently, ePATs are available for the following **EOC assessments** subjects: Algebra 1, Biology 1, and Geometry.

E-Tools
The tools and resources available to students will vary slightly depending on the subject area assessed. All students taking a computer-based assessment will have access to the following **e-tools** in the computer-based platform:

- **Review:** Students use this e-tool to mark questions to be reviewed at a later time. Before exiting the assessment and submitting their responses, students are taken to a screen that identifies questions that are answered, unanswered, and marked for review.
- **Eliminate Choice:** Students use this tool to mark through answer choices that they wish to eliminate.
- **Highlighter:** Students use this tool to highlight sections of the question or passage.
- **Eraser:** Students use the eraser to remove marks made by the highlighter or the eliminate-choice tool.
- **Help:** Students may click the Help icon to learn more about the e-tools. The Help text appears in a separate window.
- **Calculator:** Students are provided access to a calculator, which appears in a pop-up window. For Algebra 1 and Biology 1, students use a four-function calculator. For Geometry, students use a scientific calculator.
- **Straightedge:** Students are provided a straightedge e-tool, which looks like a ruler without measuring units. Students use the straightedge as they would use the edge of a piece of paper to help work a problem.
- **Exhibit:** For Algebra 1 and Geometry, students are provided a reference sheet of commonly used formulas and conversions to work the test questions. For Biology 1, students are provided the periodic table of the elements. The reference sheet and the periodic table appear in a pop-up window under the exhibit icon. Students are also provided directions for completing **fill-in response** questions (Algebra 1 and Geometry) and a diagram and helpful hints for the appropriate calculator under the exhibit icon.

In addition to the tools available to all students, students are also provided work folders to use as scratch paper to work the problems. Schools may permit students to use approved hand-held calculators, and schools can also provide paper versions of the reference sheet and periodic table.

Glossary

Note: Terms defined in this glossary that have been cross-referenced appear in **bold text** the first time they are referenced within a definition other than their own.

Achievement Levels—Once standards are set for an **EOC assessment**, scores will be defined by five categories of achievement that represent the success students demonstrate with the content assessed. Achievement Levels are helpful in interpreting what a student's score represents. Achievement Levels range from 1 to 5, with Level 1 being the lowest and Level 5 being the highest. In order to earn course credit for select assessments, students must achieve Level 3 or higher. Achievement Levels for the Algebra 1 EOC Assessment will be available beginning in 2012 and will be established using the input of classroom teachers, curriculum specialists, education administrators, and other interested citizens.

Achievement Level Policy Definitions—Definitions that summarize the level of success a student has with the **Next Generation Sunshine State Standards (NGSSS)**. Each **Achievement Level**, with Level 5 being the highest and Level 1 being the lowest, has a policy definition.

Benchmark—A specific statement that describes what students should know and be able to do. The benchmarks are part of the **NGSSS**.

Computer-Based Practice Test—Students participate in a practice test at school that demonstrates the tools and **item** types they will see on the actual assessment. The practice test is delivered through an **Electronic Practice Assessment Tool (ePAT)**, which mimics the software the students will use on the day of testing. This practice test is not intended to be a predictor of performance on the assessment. Students may also practice on their own by accessing the appropriate ePAT at www.FLAssessments.com/ePAT.

Computer-Based Testing—Several Florida statewide assessments are now being administered using a computer-based format. The **Florida EOC Assessments** are all given in a computer-based format, with paper-based accommodations offered for eligible students. When taking the test on the computer, students make their answer choices using the mouse or keyboard, and they may use various **e-tools**, such as the eliminate-choice tool or the review tool, as they work. Once they have completed the test, they submit their answers electronically. Before exiting the assessment and submitting their responses, students are taken to a screen that identifies questions that are answered, unanswered, and marked for review.

Content Area—See **Reporting Category**.

Content Area Scores—The actual number of questions answered correctly within each **reporting category** of an assessment. Content area scores are reported for the following reporting categories for the Algebra 1 EOC Assessment: *Functions, Linear Equations, and Inequalities; Polynomials;* and *Rationals, Radicals, Quadratics, and Discrete Mathematics*. Content area scores are also referred to as raw scores.

Course Description—The content knowledge and skills taught in a course. **EOC assessments** measure achievement of students enrolled in a course by assessing the **NGSSS benchmarks** assigned to the course description for the subject area. Course descriptions may be accessed at http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx.

Electronic Practice Assessment Tool (ePAT)—See **Computer-Based Practice Test**.

English Language Learners (ELLs)—Students classified as ELLs who are enrolled in an English for Speakers of Other Languages (ESOL) program. These students are permitted testing accommodations when taking the Algebra 1 EOC Assessment if the accommodations are specified in student ELL plans.

EOC Assessment—See **Florida End-of-Course (EOC) Assessments**.

Equating—A process that occurs during scoring in which results from different test forms are reviewed and compared so that the same scores for each test form indicate the same level of achievement. This process ensures that the difficulty level of each test form is adjusted so that scores across test forms are comparable.

E-Tools—Tools available to students in the **computer-based testing** platform. These tools include a highlighter, eraser, eliminate-choice tool, straightedge, calculator, reference sheet, review tool, and an exhibit tool. Students may use these tools at any time during the assessment.

Exceptional Student Education (ESE)—Special educational services that are provided to eligible students, e.g., visually impaired, hearing impaired. These services are required by federal law and are provided to Florida students according to the State Board of Education Rule 6A-6.0331, Florida Administrative Code. Students demonstrate the conditions required for the services, and services are provided as described in an Individual Educational Plan (IEP) or **Section 504** Plan. The IEP or Section 504 Plan also specifies the testing accommodations a student needs for classroom instruction and assessments.

Field Test—Before a statewide assessment can occur, a field test must be conducted in order to try out questions before they are used to determine a student's score. Field tests are administered to a representative sample of students throughout the state.

Field-test questions—Newly developed questions that are being sampled before they can be used on a future test. Field-test questions must be sampled at least one year before they are actually used to determine a student's score. If the data on the field-test questions are acceptable, then the questions may be used on an actual test and count toward a student's score.

Fill-In Response—Test questions that require students to solve a problem for which the answer is numerical. Students will use the keyboard or number pad to type the digits 0-9 or the symbols for a decimal point, fraction bar, or negative sign in the answer boxes. The fill-in response format is used in the Algebra 1 and Geometry End-of-Course Assessments.

Florida End-of-Course (EOC) Assessments—Tests designed to measure student achievement of the **NGSSS** for specific courses, as outlined in their **course descriptions**. These assessments are part of Florida's Next Generation Strategic Plan for increasing student achievement and improving college and career readiness. The first assessment to begin the transition to EOC testing in Florida is the 2011 Algebra 1 EOC Assessment. There are plans to implement additional EOC assessments in the following subject areas: Biology 1, Geometry, U.S. History, and Civics.

Items—Test questions that students are required to solve.

Limited English Proficient (LEP)—See **English Language Learners (ELL)**.

Mean—An average of the individual scores that describes the performance of a group of students. The mean is computed by finding the sum of all scores and dividing by the number of students.

Median—A score that identifies the middle value of a group of data. The median is the point at which a group of numbers (scores) is divided in half (50 percent above and below).

Mode—The most frequently occurring score in a set of scores. If a distribution of scores is statistically normal, the **mean**, **median**, and mode are the same score.

Multiple-Choice—Test questions that present students with several options from which to choose the correct answer. Florida EOC Assessments use questions in which four choices are given, only one of which is correct.

Next Generation Sunshine State Standards (NGSSS)—The core content of the curricula taught in Florida. The NGSSS specify the core content knowledge and skills that K-12 public school students are expected to acquire in the subject areas of language arts, mathematics, science, social studies, visual and performing arts, physical education, health, and foreign languages. The NGSSS **benchmarks** identify what a student should know and be able to do at each grade level for each subject area.

Normative Data—Data representing prescribed norms or averages. For example, types of normative data available for the first test administration year for EOC assessments are mean and the percentage of students scoring in each third.

Points Earned—See **Content Area Scores**.

Points Possible—The number of "Points Possible" is the total number of test questions for a **content area**, or **reporting category**, on a test. Each question counts as one point. The number of points possible in a content area may change slightly each year.

Reporting Category—The assessed student knowledge and skills, or **benchmarks**, are grouped into broad **content areas** called reporting categories.

Section 504—A special classification of students as defined in Section 504 of the Rehabilitation Act of 1973. Testing accommodations are permitted for students who meet the 504 criteria.

Standard Deviation—The amount of average variation, or dispersion, from the mean.

State Mean—The average score for each grade used for comparison purposes. Individual student scores, school **mean** scores, or district mean scores can be compared to state averages.

T Scores—The score that students receive the first year that an **EOC assessment** is administered. T scores are reported using a norm-referenced score scale known as a **T-score scale**.

T-Score Scale—A scale of 20-80 in which the **state mean** is a score of 50 and the **standard deviation** is 10.

Appendix A: Achievement Levels

As with the FCAT and FCAT 2.0, **Achievement Levels** ranging from 1 to 5 (Level 1 being the lowest and Level 5 being the highest) will describe student success on the **Florida EOC Assessments**. Achievement Levels will not be reported for the spring 2011 results. The final score scale and Achievement Levels for each **EOC assessment** will be established by the State Board of Education in the fall after the first statewide test administration occurs (this will occur in November 2011 for Algebra 1). The passing score for each EOC assessment will be the minimum scale score in Achievement Level 3.

The **Achievement Level Policy Definitions**, which describe student success with the ***Next Generation Sunshine State Standards*** **(NGSSS)**, for the Florida EOC Assessments are as follows:

Level 5 Students at this level demonstrate mastery of the most challenging content of the *Next Generation Sunshine State Standards*.

Level 4 Students at this level demonstrate an above satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.

Level 3 Students at this level demonstrate a satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.

Level 2 Students at this level demonstrate a below satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.

Level 1 Students at this level demonstrate an inadequate level of success with the challenging content of the *Next Generation Sunshine State Standards*.

Once **Achievement Levels** are established for an **EOC assessment**, students must pass the EOC assessment by earning an Achievement Level 3 score or higher in order to earn course credit. Table 3 below provides the school year when students will be required to earn an Achievement Level 3 (AL3) or higher in order to earn course credit. While students do not earn course credits in middle school, passing the Civics EOC Assessment will be required for promotion to high school (grade 9) from the middle grades.

Table 3: Implementation Schedule for the Achievement Level 3 Requirement for Florida EOC Assessments

School Year AL3 Requirement Begins	Florida EOC Assessment
2011-12	Algebra 1 EOC Assessment
2012-13	Biology 1 EOC Assessment Geometry EOC Assessment
2014-15	Civics EOC Assessment

Note: The U.S. History EOC Assessment is not included in this chart because students will not be required to earn an AL3 or higher on the U.S. History EOC Assessment to earn course credit.