



2008-2009

ANNUAL REPORT

Grades 3, 5, 6, 7, and 9

Louisiana Department of
EDUCATION

Paul G. Pastorek
State Superintendent of Education

State Board of Elementary and Secondary Education

Mr. Keith Guice
President
Fifth District

Mr. Walter Lee
Vice President
Fourth District

Ms. Louella Givens
Secretary/Treasurer
Second District

Mr. James D. Garvey, Jr.
First District

Ms. Glenny Lee Buquet
Third District

Mr. Charles E. Roemer
Sixth District

Mr. Dale Bayard
Seventh District

Ms. Jeanette Vosburg
Executive Director

Ms. Linda Johnson
Eighth District

Mr. John L. Bennett
Member-at-Large

Ms. Penny Dastugue
Member-at-Large

Ms. Tammie A. McDaniel
Member-at-Large

For further information, contact:
Scott Norton, Ph.D., Assistant Superintendent
Office of Student and School Performance
1-877-453-2721

The Louisiana Department of Education (LDE) does not discriminate on the basis of sex in any of the education programs or activities that it operates, including employment and admission related to such programs and activities. The LDE is required by Title IX of the Education Amendments of 1972 (Title IX) and its implementing regulations not to engage in such discrimination. LDE's Title IX Coord. is Patrick D. Weaver, Deputy Undersecretary, LDE, Exec. Office of the Supt.; PO Box 94064, Baton Rouge, LA 70804-9064; 877-453-2721 or customerservice@la.gov. All inquiries pertaining to LDE's policy prohibiting discrimination based on sex or to the requirements of Title IX and its implementing regulations can be directed to Patrick D. Weaver or to the USDE, Asst. Sec. for Civil Rights.

This public document was published at a total cost of \$1,000. This document was published for the Louisiana Department of Education, Office of Student and School Performance, Division of Assessments and Accountability, PO Box 94064, Baton Rouge, LA 70804-9064, by Data Recognition Corporation, 13490 Bass Lake Road, Maple Grove, MN 55311. This material was printed in accordance with the standards for printing by State Agencies established pursuant to R.S. 43:31.

iLEAP 2009 ANNUAL REPORT TABLE OF CONTENTS

SECTION 1: THE <i>INTEGRATED</i> LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM.....	1
Introduction	1
Content Standards.....	1
Test Design and Item Development	3
Special Populations and Accommodations	4
Reporting of iLEAP Scores	5
SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS	6
Overview	6
The English Language Arts Test	6
The Math Test	7
The Science Test	8
The Social Studies Test	8
Setting the Performance Standards	9
Summary	13
Tables	
Number and Percent of Students at Each Achievement Level	
Table 1: 2006–2009 State Results—Grade 3, English Language Arts and Math	14
Table 2: 2006–2009 State Results—Grade 3, Science and Social Studies	15
Table 3: 2006–2009 State Results—Grade 5, English Language Arts and Math	16
Table 4: 2006–2009 State Results—Grade 5, Science and Social Studies	17
Table 5: 2006–2009 State Results—Grade 6, English Language Arts and Math	18
Table 6: 2006–2009 State Results—Grade 6, Science and Social Studies	19
Table 7: 2006–2009 State Results—Grade 7, English Language Arts and Math	20
Table 8: 2006–2009 State Results—Grade 7, Science and Social Studies	21
Table 9: 2006–2009 State Results—Grade 9, English Language Arts and Math	22

Table 10: 2006–2009 State Results—PreGED/Skills, English Language Arts and Math	23
Table 11: 2006–2009 State and District Results—Grade 3, English Language Arts and Math	24
Table 12: 2006–2009 State and District Results—Grade 3, Science and Social Studies	39
Table 13: 2006–2009 State and District Results—Grade 5, English Language Arts and Math	54
Table 14: 2006–2009 State and District Results—Grade 5, Science and Social Studies	69
Table 15: 2006–2009 State and District Results—Grade 6, English Language Arts and Math	84
Table 16: 2006–2009 State and District Results—Grade 6, Science and Social Studies	99
Table 17: 2006–2009 State and District Results—Grade 7, English Language Arts and Math	114
Table 18: 2006–2009 State and District Results—Grade 7, Science and Social Studies	129
Table 19: 2006–2009 State and District Results—Grade 9, English Language Arts and Math	144
State Performance by Content Standard and Item Type	
Table 20: 2009 State Results—Grade 3, English Language Arts	159
Table 21: 2009 State Results—Grade 3, Math	160
Table 22: 2009 State Results—Grade 3, Science	161
Table 23: 2009 State Results—Grade 3, Social Studies	162
Table 24: 2009 State Results—Grade 5, English Language Arts	163
Table 25: 2009 State Results—Grade 5, Math	164
Table 26: 2009 State Results—Grade 5, Science	165
Table 27: 2009 State Results—Grade 5, Social Studies	166
Table 28: 2009 State Results—Grade 6, English Language Arts.....	167
Table 29: 2009 State Results—Grade 6, Math	168
Table 30: 2009 State Results—Grade 6, Science	169
Table 31: 2009 State Results—Grade 6, Social Studies	170
Table 32: 2009 State Results—Grade 7, English Language Arts	171
Table 33: 2009 State Results—Grade 7, Math	172
Table 34: 2009 State Results—Grade 7, Science	173
Table 35: 2009 State Results—Grade 7, Social Studies	174
Table 36: 2009 State Results—Grade 9, English Language Arts	175
Table 37: 2009 State Results—Grade 9, Math	176
Table 38: 2009 State Results—PreGED/Skills, English Language Arts	177
Table 39: 2009 State Results—PreGED/Skills, Math	178

Figures

2009 State and District Results—Grade 3

Figure 1: Percent of Students Scoring Basic or Above, English Language Arts 180
Figure 2: Percent of Students Scoring Basic or Above, Math 181
Figure 3: Percent of Students Scoring Basic or Above, Science 182
Figure 4: Percent of Students Scoring Basic or Above, Social Studies 183

2009 State and District Results—Grade 5

Figure 5: Percent of Students Scoring Basic or Above, English Language Arts 184
Figure 6: Percent of Students Scoring Basic or Above, Math 185
Figure 7: Percent of Students Scoring Basic or Above, Science 186
Figure 8: Percent of Students Scoring Basic or Above, Social Studies 187

2009 State and District Results—Grade 6

Figure 9: Percent of Students Scoring Basic or Above, English Language Arts 188
Figure 10: Percent of Students Scoring Basic or Above, Math 189
Figure 11: Percent of Students Scoring Basic or Above, Science 190
Figure 12: Percent of Students Scoring Basic or Above, Social Studies 191

2009 State and District Results—Grade 7

Figure 13: Percent of Students Scoring Basic or Above, English Language Arts 192
Figure 14: Percent of Students Scoring Basic or Above, Math 193
Figure 15: Percent of Students Scoring Basic or Above, Science 194
Figure 16: Percent of Students Scoring Basic or Above, Social Studies 195

2009 State and District Results—Grade 9

Figure 17: Percent of Students Scoring Basic or Above, English Language Arts 196
Figure 18: Percent of Students Scoring Basic or Above, Math 197

SECTION 3: THE NRT COMPONENT AND COMPONENT TEST RESULTS	199
Overview	199
The Iowa Tests	199
Norm-referenced Test Scores	200
Standard Score	201
Percentile Rank	201
Stanine	202
Normal Curve Equivalent	202
Other Score Information	202
Standard Deviation	202
Interpreting Scores: A Caution	203
NRT Scores	204
Comparison of NRT Scores	205
Summary	206
Tables	
National Percentile Rank of Average Standard Score	
Table 40: 2006–2009 State and District Results—Grade 3	207
Table 41: 2006–2009 State and District Results—Grade 5	222
Table 42: 2006–2009 State and District Results—Grade 6	237
Table 43: 2006–2009 State and District Results—Grade 7	252
Table 44: 2006–2009 State and District Results—Grade 9	267
Table 45: 2006–2009 State Results—PreGED/Skills	282
APPENDIX: 2009 STATE AND DISTRICT ACHIEVEMENT LEVEL RESULTS	283

SECTION 1: THE *INTEGRATED* LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM

INTRODUCTION

From 1998 through 2005, Louisiana students at grades 3, 5, 6, 7, and 9 were assessed using The Iowa Tests, which are norm-referenced tests (NRTs). The Iowa Tests provide data for evaluating Louisiana students' performance compared to the performance of students across the nation. The *No Child Left Behind Act* (NCLB), enacted in 2002, requires that state assessments be aligned to state content standards and that student results be expressed in terms of the state's performance standards (Louisiana's five achievement levels, ranging from *Unsatisfactory* to *Advanced*). Since The Iowa Tests alone do not fulfill this NCLB requirement, the *integrated* Louisiana Educational Assessment Program (*iLEAP*) was developed. Beginning in spring 2006, the *iLEAP* tests were administered to public school students in grades 3, 5, 6, 7, and 9.

The *iLEAP* English Language Arts and Math tests, administered at grades 3, 5, 6, 7, and 9, consist of a norm-referenced test (NRT) supplemented with items developed to align with the Louisiana Grade-Level Expectations (GLEs). The additional GLE-based items combine with The Iowa Tests items that align with GLEs to form the criterion-referenced test (CRT) component of *iLEAP*. The difference between the two components (NRT and CRT) is the manner in which test results are interpreted. The two components yield two types of test scores: scores that represent performance according to the Louisiana state standards (CRT scores) and scores that represent performance compared to the national norms (NRT scores).

The *iLEAP* Science and Social Studies tests, administered at grades 3, 5, 6, and 7, are entirely criterion referenced. All items were specifically developed for the *iLEAP* according to the state content standards, benchmarks, and GLEs. Unlike the *iLEAP* English Language Arts

and Math tests, no items were from The Iowa Tests. In other words, the Science and Social Studies tests contain only the CRT component. At grade 9, science and social studies are not assessed since students may take various courses in these content areas.

Some of Louisiana's NCLB requirements are met through Louisiana's CRTs in English language arts and mathematics at grades 4, 8, and 10 and in science at grades 4, 8, and 11. (In addition, Louisiana requires that students test in social studies at grades 4, 8, and 11.) These tests compose the LEAP and Graduation Exit Examination (GEE) assessments.

There are two main differences between *iLEAP* and the LEAP and GEE assessments. First, *iLEAP* yields both CRT and NRT scores. This combination results in one assessment tool meeting both the NCLB's requirements and Louisiana's state law requiring NRT assessments. Second, Louisiana's high-stakes testing policy does not require that students in the *iLEAP* grades (3, 5, 6, 7, and 9) attain a specific achievement level to be promoted to the next grade level.

CONTENT STANDARDS

Louisiana content standards reflect the essential concepts and skills students are expected to know and perform. The foundation skills, identified as essential competencies needed to meet the demands of the classroom and the world beyond, are the basis of all content standards. These foundation skills are:

- communication,
- problem solving,
- resource access and utilization,
- linking and generating knowledge, and
- citizenship.

SECTION 1: THE *INTEGRATED* LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM

Content Standards Measured by *i*LEAP

	English Language Arts*	Math	Science	Social Studies
Content Standards Measured	<ul style="list-style-type: none"> • Read, comprehend, and respond to a range of materials • Write competently • Use conventions of language • Locate, select, and synthesize information • Read, analyze, and respond to literature • Apply reasoning and problem-solving skills 	<ul style="list-style-type: none"> • Number and Number Relations • Algebra • Measurement • Geometry • Data Analysis, Probability, and Discrete Math • Patterns, Relations, and Functions 	<ul style="list-style-type: none"> • Science as Inquiry • Physical Science • Life Science • Earth and Space Science • Science and the Environment 	<ul style="list-style-type: none"> • Geography: Physical and Cultural Systems • Civics: Citizenship and Government • Economics: Interdependence and Decision Making • History: Time, Continuity, and Change

*Note: The content standard “Apply speaking and listening skills” is not assessed.

SECTION 1: THE *INTEGRATED* LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM

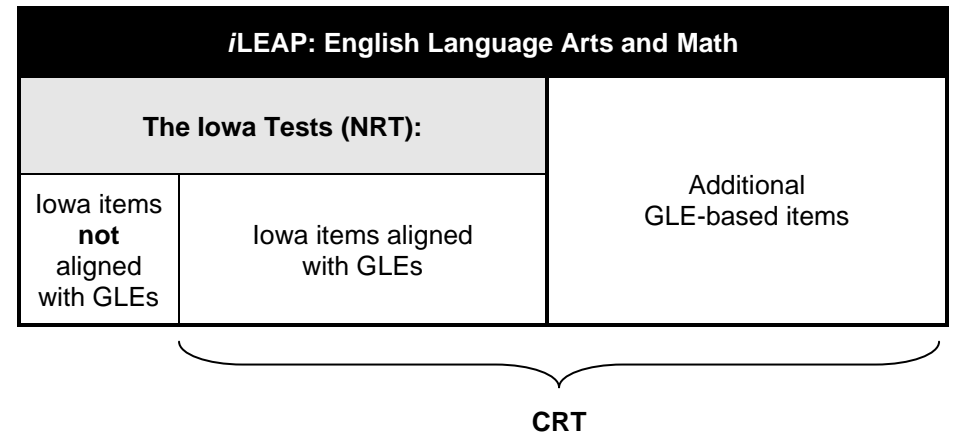
TEST DESIGN AND ITEM DEVELOPMENT

The *i*LEAP tests were constructed using test items from two sources: items from The Iowa Tests and new items specifically developed to measure certain content standards and GLEs.

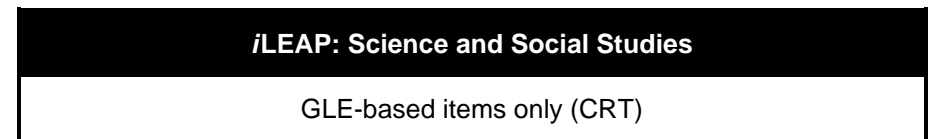
The development of *i*LEAP test forms for English language arts and mathematics began with an alignment study. Alignment specialists matched items from the Survey Battery of the *Iowa Tests of Basic Skills (ITBS)* for grades 3, 5, 6, and 7 and the Core Battery of the *Iowa Tests of Educational Development (ITED)* for grade 9 to the Louisiana content standards, benchmarks, and GLEs. This study identified the relationship between The Iowa Tests and the state standards for student performance required by NCLB.

To develop an assessment framework to meet state performance standards, the alignment specialists further identified gaps in coverage or instances of less than optimal alignment between the GLEs and the NRT items. For GLEs not represented in the *ITBS* and *ITED*, additional items were developed. These additional items were written specifically to align to the Louisiana content standards, benchmarks, and GLEs and *integrated* into a common test booklet along with the *ITBS* or *ITED*.

The *i*LEAP English Language Arts and Math tests, therefore, consist of a norm-referenced test (NRT) supplemented with items developed to align with GLEs. The additional GLE-based items combine with The Iowa Tests items that align with GLEs to form the criterion-referenced test (CRT) component of *i*LEAP. Scores derived from the CRT component indicate how well a student has mastered state content standards.



The *i*LEAP Science and Social Studies tests, administered at grades 3, 5, 6, and 7, are entirely criterion referenced. All items were specifically developed for the *i*LEAP according to the state content standards, benchmarks, and GLEs. At grade 9, science and social studies are not assessed since students may take various courses in these content areas.



For each grade, all content-area tests are bound in one test booklet, which integrates NRT and CRT items. For English Language Arts, three item types are used to assess students: multiple-choice items, constructed-response items, and a writing prompt. The Math test contains multiple-choice items and constructed-response items. All items on *i*LEAP Science and Social Studies tests are in multiple-choice format.

SECTION 1: THE *INTEGRATED* LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM

SPECIAL POPULATIONS AND ACCOMMODATIONS

SPECIAL EDUCATION STUDENTS

Until 2003, special education students except those who participated in the Louisiana Alternate Assessment, Level 1 (LAA 1)—formerly LAA or LAA-B—or high school students who participated in the Options (PreGED/Skills) Program were required to participate in and meet the requirements of LEAP or GEE testing at grades 4, 8, 10, and 11 or the Louisiana Norm-Referenced Testing Program (LNRTP) at grades 3, 5, 6, 7, and 9. As of the 2004–2005 school year, LNRTP was discontinued and replaced with *i*LEAP. In 2005–2006, the LEAP Alternate Assessment, Level 2 (LAA 2), was introduced in grades 4, 8, 10, and 11 for students with persistent academic disabilities. Grades 5, 6, 7, and 9 were added in 2006–2007. All students in grades 3, 5, 6, 7, and 9, and students in the Options (PreGED/Skills) Program participate in *i*LEAP testing except for those whose Individualized Education Programs (IEPs) indicate they participate in LAA 1 or LAA 2. Grade 3 students are not eligible for LAA 2; they participate in *i*LEAP or LAA 1.

Exceptions to standard test administration procedures may be made for special education students if the accommodations are addressed in the students' IEPs and routinely used in classroom instruction and assessment.

STUDENTS WITH ONE OR MORE DISABILITIES ACCORDING TO SECTION 504

All students with one or more disabilities according to Section 504 are to be tested. Test accommodations are permitted if they are routinely provided in the students' regular instructional and assessment program and if the other conditions specified in the administrative guidelines for students with disabilities according to Section 504 of the Rehabilitation Act of 1973 are met.

The following test accommodations may be used for IDEA special education students and for students with disabilities according to Section 504.

Braille. Braille test booklets are available for students requiring them. Generally, all test items in the standard print edition of the test booklet and answer document are included in the braille test booklet. If an item is omitted from the braille test, students receive credit for it.

Large Print. Large-print test booklets are available for students requiring them. The large-print edition is essentially an enlarged version of the standard print edition of the test.

Answers Recorded. If a student is unable to write due to his or her disability, the test must be administered individually to allow the student to dictate orally or sign his or her responses to the test administrator.

Assistive Technology. Assistive technology may include but is not limited to a computer, tape recorder, calculator, abacus, grip for a pencil, visual magnification device, communication device, mask or marker to maintain place, speech synthesizer, or an electronic reader or spellchecker and/or dictionary.

Extended Time. Time on both the timed and untimed parts of *i*LEAP may be adjusted for certain students, such as those who have short attention spans or those who may be unable to concentrate for long periods of time on a given task. The test administration time may have to be altered considerably to allow for intermittent short breaks during the testing period. Or it may be determined appropriate to administer the test in a number of short sessions. The time of day the test is administered may be adjusted to a time more beneficial to the student.

Communication Assistance. A test administrator and/or interpreter who is fluent in the signing or cuing modality routinely used by the student should be available to repeat or clarify directions and sign the tests if warranted by the student's reading level as documented on the IEP or IAP and Data Validation form. The passages, items/questions, and answer options on Reading, part 2 (grades 3, 5–7), or Reading Comprehension (grade 9) cannot be signed or cued.

Transferred Answers. If a student recorded answers in the test booklet or on a separate sheet of paper or used braille, large-print, or other technological assistive devices documented on the student's IEP or IAP and Data Validation form, the test administrator must transfer the student's responses onto a scorable answer document exactly as the student wrote them.

SECTION 1: THE *INTEGRATED* LOUISIANA EDUCATIONAL ASSESSMENT PROGRAM

Individual/Small Group Administration. Tests may be administered to an individual or a small group of students (maximum, eight) who require more attention than can be provided in a larger classroom.

Tests Read Aloud. Students receiving this accommodation must have been provided it in classroom assessment. These students should have the tests read aloud with the exception of Reading, part 2 (grades 3, 5–7), or Reading Comprehension (grade 9), which cannot be read aloud.

Other. Any necessary accommodations may be used, but they must be determined by the IEP team or Section 504 committee and documented on the student’s IEP or IAP and Data Validation form and must not breach test security or invalidate the meaning of the test score or the purpose of the test.

LIMITED ENGLISH PROFICIENT (LEP) STUDENTS

As of 2003, all LEP students are required to be tested, but accommodations are permitted, provided they are used in the students’ classroom instruction and assessment. Some of the accommodations for LEP students are the same as those for special education students. Explanations of those that are the same appear in the previous section.

- **Extended Time.** Time on both timed and untimed parts of *i*LEAP may be adjusted for certain students who must process from one language to another. Language processing is extremely tiring; therefore, the administration time may have to be altered considerably to allow for intermittent short breaks during the testing period. Or it may be determined appropriate to administer the test in a number of short sessions. Testing may also be stopped and continued at a later time.
- **Individual/Small Group Administration**
- **Provision of English/Native Language Word-to-Word Dictionary (No Definitions).** LEP students may use either a standard or electronic English/native language word-to-word dictionary (no definitions) on all *i*LEAP tests.

- **Test Administered by English as a Second Language (ESL) Teacher or by Individual Providing Language Services.** Familiarity with the speech patterns of the ESL teacher or the individual providing language services may help the student understand the test directions or the portions of the test that are read aloud if the student receives the accommodation *Tests Read Aloud*.
- **Tests Read Aloud**

See *Bulletin 118* (<http://www.doa.louisiana.gov/osr/lac/28v111/28v111.doc>) for complete explanations of all accommodations.

REPORTING OF *i*LEAP SCORES

The two components of *i*LEAP yield two types of test scores: scores that represent performance according to the Louisiana state standards (CRT scores) and scores that represent performance compared to the national norms (NRT scores). The *i*LEAP test results are reported at student, school, district, and state levels.

This report provides information about how to understand test results for the two components:

The **CRT component** of *i*LEAP measures how well a student has mastered the state content standards. Each student’s results for the CRT component are reported by achievement levels (*Advanced, Mastery, Basic, Approaching Basic, and Unsatisfactory*), scaled scores, and content standard scores. These CRT scores are derived from items, aligned to GLEs, that are specifically developed to measure Louisiana content standards and items from the NRT component that align to Louisiana content standards and GLEs.

The **NRT component** of *i*LEAP measures student performance in Reading, Language, and Math. The NRT component provides normative scores including standard score, national percentile rank, national stanine, and normal curve equivalent scores.

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

OVERVIEW

Section 2 of this report provides a brief overview of the CRT component of the *i*LEAP tests, an explanation of how achievement levels were determined, and a description of the standard-setting process for *i*LEAP. The achievement level scaled-score ranges by grade and subject are also presented in this section. Finally, tables summarizing the number and percent of students who scored at each achievement level on the 2008 *i*LEAP tests are included at the end of this section.

The CRT component of the *i*LEAP test consists of items that measure state content standards and GLEs, including items on The Iowa Tests that directly align with GLEs. The *i*LEAP tests yield scores according to one of the following achievement levels:

Advanced: A student at this level has demonstrated superior performance beyond the level of mastery.

Mastery: A student at this level has demonstrated competency over challenging subject matter and is well prepared for the next level of schooling.

Basic: A student at this level has demonstrated only the fundamental knowledge and skills needed for the next level of schooling.

Approaching Basic: A student at this level has only partially demonstrated the fundamental knowledge and skills needed for the next level of schooling.

Unsatisfactory: A student at this level has not demonstrated the fundamental knowledge and skills needed for the next level of schooling.

THE ENGLISH LANGUAGE ARTS TEST

The *i*LEAP English Language Arts test measures concepts and skills in six of the seven English language arts content standards:

Standard 1

Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

Standard 2

Students write competently for a variety of purposes and audiences.

Standard 3

Students communicate using standard English grammar, usage, sentence structure, punctuation, capitalization, spelling, and handwriting.

Standard 5

Students locate, select, and synthesize information from a variety of texts, media, references, and technological sources to acquire and communicate knowledge.

Standard 6

Students read, analyze, and respond to literature as a record of life experiences.

Standard 7

Students apply reasoning and problem-solving skills to their reading, writing, speaking, listening, viewing, and visually representing.

Standard 4, demonstrating competence in speaking and listening, is not incorporated in *i*LEAP.

For grades 3, 5, 6, and 7, the English Language Arts test consists of four subtests, which are administered over two days: Writing, Using Information Resources, Reading, Part 1 (Vocabulary) and Part 2 (Comprehension), and Language. For grade 9, there are five subtests: Writing, Using Information Resources, Vocabulary, Reading Comprehension, and Language.

The CRT component of the *i*LEAP English Language Arts test consists of the Writing and Using Information Resources subtests, as well as Reading and Language items aligned with Louisiana's English language arts GLEs:

Writing

The Writing subtest measures key aspects of standard 2. Students are expected to write a composition about an assigned topic. The particular mode of writing assessed at a given grade (grade 3, narrative or descriptive; grades 5, 6, and 7, narrative or expository; grade 9, expository or persuasive) may alternate from one assessment administration to another.

Using Information Resources

The Using Information Resources subtest measures standard 5. Using Information Resources includes excerpts from four to six reference sources, such as articles from encyclopedias, newspapers, magazines, and textbooks; parts of books such as tables of contents, copyright

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

pages, glossaries, and indexes; visual aids such as maps, graphs, tables, charts, illustrations, schedules, and diagrams; and electronic sources such as screen shots of online card catalogs, Web-site pages, and search engine results screens. Students are instructed to skim through the reference materials to become familiar with the information available and then to locate what they need to answer multiple-choice questions.

Reading

The Reading subtest (GLE-aligned items from grades 3, 5, 6, and 7 Reading, Parts 1 and 2; and grade 9 Reading Comprehension) measures standards 1, 6, and 7 with multiple-choice questions. Short sentences and phrases are used to measure students' understanding of words and their meanings; reading passages are used to measure how well they understand what they read.

Language

The Language subtest measures standards 2 and 3 with multiple-choice questions based on passages. Students demonstrate their knowledge and skills pertaining to spelling, capitalization, punctuation, and language usage and expression. In addition, various aspects of writing—such as word selection, organization, proofreading, and editing—are addressed.

THE MATH TEST

The CRT component of the *i*LEAP Math test consists of two parts:

Multiple-Choice Items

The first part consists of multiple-choice items that address Louisiana GLEs. Whenever possible, concepts and skills are assessed in real-life contexts.

Constructed-Response Items

The second part consists of two constructed-response items that assess one or more of the strands, benchmarks, and/or GLEs that require students to demonstrate the connection of one strand to other strands and to real-life situations.

The response format for this second part is open ended and may include numerical answers, short written answers, and other types of

constructed responses (drawing a model or geometrical pattern). Students may be required to explain how they determined their responses or to justify their responses. Student responses are scored analytically for such traits as accuracy of the response, proper operations used, and appropriate problem-solving approach or strategy.

The CRT component measures aspects of the six mathematics strands. In the Louisiana mathematics framework, each of six mathematics strands is associated with a single standard.

Strand N: Number and Number Relations

Standard: In problem-solving investigations, students demonstrate an understanding of the real number system and communicate the relationships within that system using a variety of techniques and tools.

Strand A: Algebra

Standard: In problem-solving investigations, students demonstrate an understanding of concepts and processes that allows them to analyze, represent, and describe relationships among variable quantities and to apply algebraic methods to real-world situations.

Strand M: Measurement

Standard: In problem-solving investigations, students demonstrate an understanding of concepts, processes, and real-life applications of measurement.

Strand G: Geometry

Standard: In problem-solving investigations, students demonstrate an understanding of geometric concepts and applications involving one-, two-, and three-dimensional geometry, and justify their findings.

Strand D: Data Analysis, Probability, and Discrete Math

Standard: In problem-solving investigations, students discover trends, formulate conjectures regarding cause-and-effect relationships, and demonstrate critical-thinking skills in order to make informed decisions.

Strand P: Patterns, Relations, and Functions

Standard: In problem-solving investigations, students demonstrate an understanding of patterns, relations, and functions that represent and explain real-world situations.

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

THE SCIENCE TEST

The *i*LEAP Science test, administered to students in grades 3, 5, 6, and 7, is entirely criterion referenced. The test requires that students use their content knowledge of science to explain, connect, and apply concepts to new situations. Students are also expected to have had a variety of experiences applying content knowledge using inquiry-based learning in all science content strands. The test contains multiple-choice items only. At grade 9, science is not assessed since students may take various courses in the subject.

According to the Louisiana science framework, there are five strands, each associated with a single standard:

Strand SI: Science as Inquiry

Standard: Students will do science by engaging in partial and full inquiries that are within their developmental capabilities.

Strand PS: Physical Science

Standard: Students will develop an understanding of the characteristics and interrelationships of matter and energy in the physical world.

Strand LS: Life Science

Standard: Students will become aware of the characteristics and life cycles of organisms and understand their relationships to each other and to their environment.

Strand ESS: Earth and Space Science

Standard: Students will develop an understanding of the properties of Earth materials, the structure of Earth's system, Earth's history, and Earth's place in the universe.

Strand SE: Science and the Environment

Standard: In learning environmental science, students will develop an appreciation of the natural environment, learn the importance of environmental quality, and acquire a sense of stewardship. As consumers and citizens, they will be able to recognize how our personal, professional, and political actions affect the natural world.

The focus for grade 3 and grade 5 students is general science concepts; for grade 6, the focus is Physical Science; and for grade 7, the focus is Life Science.

The grades 3 and 5 Science tests assess all five strands. The grade 6 Science test assesses three strands: Science as Inquiry, Physical Science, and Science and the Environment. The grade 7 Science test assesses three strands: Science as Inquiry, Life Science, and Science and the Environment.

THE SOCIAL STUDIES TEST

The *i*LEAP Social Studies test, administered to students in grades 3, 5, 6, and 7, is entirely criterion referenced. The test challenges students to expand their thinking in social studies and to become accomplished problem solvers and informed decision makers. Accordingly, the test contains a broad and challenging range of multiple-choice items. At grade 9, social studies is not assessed since students may take various courses in the subject.

Each of the four social studies strands is associated with a single standard describing what students should know and be able to do:

Strand G: Geography—Physical and Cultural Systems

Standard: Students develop a spatial understanding of Earth's surface and the processes that shape it, the connections between people and places, and the relationship between man and the environment.

Strand C: Civics—Citizenship and Government

Standard: Students develop an understanding of the structure and purposes of government, the foundations of the American democratic system, and the role of the United States in the world while learning about the rights and responsibilities of citizenship.

Strand E: Economics—Interdependence and Decision Making

Standard: Students develop an understanding of fundamental economic concepts as they apply to the interdependence and decision making of individuals, households, businesses, and governments in the United States and the world.

Strand H: History—Time, Continuity, and Change

Standard: Students develop a sense of historical time and historical perspective as they study the history of their community, state, nation, and world.

At grade 3, all four social studies strands are assessed. At grades 5 and 6, two strands are assessed: Geography and History. At grade 7, three strands are assessed: History, Geography, and Civics.

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

SETTING THE PERFORMANCE STANDARDS

Implementation of NCLB requires states to test students in reading and mathematics at all grades from 3 through 8 and at one grade in high school. Science testing is required at three grades, including one in high school as of the 2007–2008 school year. As a result, Louisiana is now testing *i*LEAP at grades 3, 5, 6, and 7 in all four content areas (English language arts, mathematics, science, and social studies) and at grade 9 in English language arts and mathematics. The high school science requirement is met by GEE testing at grade 11. This provides a comprehensive statewide assessment program throughout the range of grades required by NCLB.

Federal guidelines also require that performance standards be established. Performance standards represent the criteria that specify a minimum score a student must achieve to attain one of the five achievement levels: *Advanced*, *Mastery*, *Basic*, *Approaching Basic*, or *Unsatisfactory*. To set the performance standards for *i*LEAP, achievement level descriptors (ALDs) were developed based on the applicable GLEs and on the existing LEAP and GEE ALDs for grades 4, 8, 10, and 11. The initial *i*LEAP ALDs were reviewed by Louisiana educators in January 2004. The *i*LEAP ALDs were finalized and performance standards recommended by Louisiana educators in July 2006.

During the July 2006 meeting, a bookmark procedure was employed for standard setting. Panelists placed bookmarks in ordered-item booklets at each point they determined that item content became too difficult for students at a particular achievement level and required the knowledge and skills of students performing at a higher achievement level. Following considerable discussion, final cut scores (establishing the achievement levels) were recommended. Some recommended cuts were adjusted after the standard-setting meeting to ensure consistency in the scores across grades and achievement levels. Final cut scores (see pages 10–11) were recommended to the State Board of Elementary and Secondary Education in August 2006.

Note that performance standards are in scaled-score form. The *i*LEAP scaled scores range between 100 and 500 for all grades and content areas. This is similar to the appearance of scaled scores for the LEAP and GEE tests. It is important to note, however, that the scaled scores are not directly comparable across grade levels or content areas because of differences in test content and difficulty. Longitudinal comparisons across years would be more appropriate in terms of achievement levels.

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

iLEAP SCALED-SCORE RANGES

iLEAP GRADE 3

Achievement Level	English Language Arts Scaled-Score Range	Math Scaled-Score Range	Science Scaled-Score Range	Social Studies Scaled-Score Range
Advanced	383–500	386–500	382–500	396–500
Mastery	338–382	343–385	342–381	341–395
Basic	282–337	283–342	292–341	287–340
Approaching Basic	239–281	245–282	249–291	255–286
Unsatisfactory	100–238	100–244	100–248	100–254

iLEAP GRADE 5

Achievement Level	English Language Arts Scaled-Score Range	Math Scaled-Score Range	Science Scaled-Score Range	Social Studies Scaled-Score Range
Advanced	386–500	405–500	378–500	365–500
Mastery	341–385	355–404	341–377	339–364
Basic	286–340	282–354	292–340	289–338
Approaching Basic	247–285	250–281	248–291	257–288
Unsatisfactory	100–246	100–249	100–247	100–256

SECTION 2: THE CRT COMPONENT AND COMPONENT TEST RESULTS

iLEAP GRADE 6

Achievement Level	English Language Arts Scaled-Score Range	Math Scaled-Score Range	Science Scaled-Score Range	Social Studies Scaled-Score Range
Advanced	387–500	394–500	380–500	364–500
Mastery	341–386	358–393	343–379	338–363
Basic	280–340	281–357	295–342	292–337
Approaching Basic	239–279	248–280	251–294	261–291
Unsatisfactory	100–238	100–247	100–250	100–260

iLEAP GRADE 7

Achievement Level	English Language Arts Scaled-Score Range	Math Scaled-Score Range	Science Scaled-Score Range	Social Studies Scaled-Score Range
Advanced	383–500	421–500	388–500	372–500
Mastery	344–382	376–420	348–387	339–371
Basic	286–343	292–375	302–347	293–338
Approaching Basic	236–285	255–291	259–301	262–292
Unsatisfactory	100–235	100–254	100–258	100–261

iLEAP GRADE 9

Achievement Level	English Language Arts Scaled-Score Range	Math Scaled-Score Range		
Advanced	436–500	393–500		
Mastery	374–435	360–392		
Basic	291–373	293–359		
Approaching Basic	219–290	263–292		
Unsatisfactory	100–218	100–262		

