

Louisiana Believes

New Leap 2025 Science Assessments
and Curricular Resources
September 2018

Purpose

Quality science instruction requires that teachers

- Understand the standards and the shifts called for by the standards
- Have access to a high quality curriculum
- Understand what students will be held accountable for on the assessment

Objectives

- Understand how the OpenSciEd middle school units are aligned to the instructional shifts
- Understand how to participate and register for the OpenSciEd pilot
- Understand how the new LEAP 2025 science assessments support instruction aligned to the science shifts
- Understand the best practices for using LEAP 2025 resources

Schedule

Instructional shifts

Sample High Quality Curriculum and Pilot Opportunities

Assessment Resources

Louisiana Student Standards for Science

The new standards call for changes in the science classroom. Key shifts called for by the [Louisiana Student Standards for Science](#):

Apply content knowledge

Content knowledge is critical and evident in the standards in the **Disciplinary Core Ideas**, the key ideas in science that have broad importance within or across multiple science or engineering disciplines. However, simply having content knowledge is not enough. Students must investigate and apply content knowledge to scientific phenomenon.

Investigate, evaluate, and reason scientifically

Scientists do more than learn about science; they “do” science. Science instruction must integrate the practices, or behaviors, of scientists and engineers as they investigate real-world phenomenon and design solutions to problems.

Connect ideas across disciplines

For students to develop a coherent and scientifically-based view of the world, they must make connections across the domains of science (life science, physical science, earth and space science, environmental science, and engineering, technology, and applications of science). The **crosscutting concepts** have applications across all domains.

Three Dimensional Learning: the integration of the **Science and Engineering Practices**, **Disciplinary Core Ideas**, and **Crosscutting Concepts** in science instruction

Schedule

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Sample High Quality Curriculum and Pilot Opportunities

Assessment Resources

Instruction

OpenSciEd has developed several high quality middle school units, which are aligned to Louisiana Student Standards for Science and the science instructional shifts.

For the next section, you will take on the role of a student as you engage in a seventh grade OpenSciEd unit.

Explore the Anchor Phenomenon

M’Kenna, a 13-year-old girl, has recently started feeling sick all the time. Her primary complaints are that her stomach hurts after she eats and that she has diarrhea and stomach cramping.

Turn and talk: Knowing that M’Kenna’s primary complaints are that her stomach hurts after she eats and that she has diarrhea and stomach cramping, what other kinds of symptoms might you expect M’Kenna to have?

Explore the Anchor Phenomenon

M'Kenna's Doctor's Note

Patient's Name: M'Kenna

Age: 13

Symptoms

General Symptoms <ul style="list-style-type: none"><input type="checkbox"/> Fever<input type="checkbox"/> Fainting<input checked="" type="checkbox"/> Fatigue<input checked="" type="checkbox"/> Weight loss<input type="checkbox"/> Weight gain	Respiratory System <ul style="list-style-type: none"><input checked="" type="checkbox"/> Difficulty breathing with exercise<input type="checkbox"/> Difficulty breathing all the time<input type="checkbox"/> Chest pain<input type="checkbox"/> Wheezing<input type="checkbox"/> Asthma	Circulatory System <ul style="list-style-type: none"><input checked="" type="checkbox"/> Rapid heart beat with exercise<input type="checkbox"/> Slow heartbeat<input type="checkbox"/> Cold feet or hands<input type="checkbox"/> Chest pain<input type="checkbox"/> High blood pressure
Digestive System <ul style="list-style-type: none"><input checked="" type="checkbox"/> Nausea<input checked="" type="checkbox"/> Vomiting<input checked="" type="checkbox"/> Abdominal cramps<input checked="" type="checkbox"/> Diarrhea<input type="checkbox"/> Constipation	Muscles and Skeletal System <ul style="list-style-type: none"><input type="checkbox"/> Back pain<input type="checkbox"/> Leg pain<input checked="" type="checkbox"/> Muscle cramps<input type="checkbox"/> Swollen joints<input type="checkbox"/> Difficulty walking or moving	Nervous System <ul style="list-style-type: none"><input type="checkbox"/> Confusion<input type="checkbox"/> Dizziness<input checked="" type="checkbox"/> Brain fog or difficulty concentrating<input type="checkbox"/> Headaches<input type="checkbox"/> Numbness

Notes

Patient complains that her stomach hurts after she eats and that she feels nausea. Her parents say she eats regular meals but has suddenly started losing a lot of weight. The patient says she often has diarrhea and stomach cramping. She has a hard time breathing when she tries to play basketball and gets out of breath quickly. Patient complains of feeling tired and weak all the time.

As a group, review and discuss M'Kenna's Doctor's Note

What do you notice, think, and wonder as you are reviewing the doctor's note?

Attempt to Make Sense of the Anchor Phenomenon

M'Kenna's Doctor's Note

Patient's Name: M'Kenna

Age: 13

Symptoms

General Symptoms <ul style="list-style-type: none"><input type="checkbox"/> Fever<input type="checkbox"/> Fainting<input checked="" type="checkbox"/> Fatigue<input checked="" type="checkbox"/> Weight loss<input type="checkbox"/> Weight gain	Respiratory System <ul style="list-style-type: none"><input checked="" type="checkbox"/> Difficulty breathing with exercise<input type="checkbox"/> Difficulty breathing all the time<input type="checkbox"/> Chest pain<input type="checkbox"/> Wheezing<input type="checkbox"/> Asthma	Circulatory System <ul style="list-style-type: none"><input checked="" type="checkbox"/> Rapid heart beat with exercise<input type="checkbox"/> Slow heartbeat<input type="checkbox"/> Cold feet or hands<input type="checkbox"/> Chest pain<input type="checkbox"/> High blood pressure
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Notes

Patient complains that her stomach hurts after she eats and that she feels nausea. Her parents say she eats regular meals but has suddenly started losing a lot of weight. The patient says she often has diarrhea and stomach cramping. She has a hard time breathing when she tries to play basketball and gets out of breath quickly. Patient complains of feeling tired and weak all the time.

Develop an initial model to explain what is going on with M'Kenna. In your model, you should:

Use pictures, symbols and words to try to explain what is going on with M'Kenna.

Try to account for ALL of the symptoms that we noticed in the doctor's note. The focus here is on explaining what might be causing those symptoms.

Record questions that you have if you become stuck.

Develop Questions and Next Steps

As a group,

- What questions do you now have that you would like to add to our driving question board?

Based on the driving question board, what kind of investigations could we do and/or what kind of additional data would we need to figure out what is going on with M’Kenna?

Explore the Unit Resources

As a group,

- Review the artifacts and performance expectations from the unit.
- How will these activities support students as they try to make sense of the phenomenon?
- How are these activities connected to the instructional shifts?

OpenSciEd Piloting Information

Middle school OpenSciEd units will be available to be piloted during the winter of the 2018-2019 school year.

1. Overview of Scope and Sequence Calendars
2. Professional Development Dates and Costs
 - a. LSU Cain Center
 - b. LaTech
3. Materials Kits and Costs: Approximately \$500
4. [Book Orders and Costs](#)
5. OpenSciEd Pilot Registration Information
 - a. [LSU Cain Center Registration Link](#)
 - b. [LaTech Registration Link](#)

Schedule

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Sample High Quality Curriculum and Pilot Opportunities

Assessment Resources

LEAP 2025 Assessments

Support the Instructional Shifts

Apply Content Knowledge (DCI)

- answer questions that require skills and content knowledge
- use stimulus materials connected to a scientific phenomenon

Investigate, Evaluate, and Reason Scientifically (SEP)

- do more than answer recall questions about science
- apply the practices of scientists and engineers
- investigate each real-world phenomenon and design solutions to given problems

Connect Ideas Across Disciplines (CCC)

- respond to sets of questions which assess application of knowledge across the domains of science for a comprehensive picture of student readiness for their next grade or course in science

LEAP 2025 Assessment Guides

Available in the [Assessment Guidance Library](#)

Information Within

- Sample items and sets with multi-dimensional alignment analysis supporting the instructional shifts in science
- Information about item types, set-based design, and test administration
- Resources on test administration, practice tests, and instruction

Forthcoming Information - Fall 2018

- Detailed information about the test design and reporting categories

How do you use the Assessment Guides?

What instructional benefit might they provide?

LEAP 2025 Practice Tests

Available Now

Teacher Access for all content areas, grades, and courses:

- <https://wbte.drceirect.com/LA/#portal/la/510848/ott/8/username/password/false>
- Google Chrome browser
- print version in [eDirect](#)

Student Access for all high school courses:

- requires INSIGHT
- not available in paper form

Materials for administration and scoring:

- [Practice Test Library](#)
- answer keys
- all accommodated materials and forms

Key Resources for teachers and supervisors:

- [LEAP 2025 Science Practice Test Guidance](#)
- [Practice Test Quickstart Guide](#)

LEAP 2025 Practice Test Guidance

Purpose of the Practice Test

- intended to be used as an **instructional tool**
- **cannot** predict performance on the summative test

Purpose of the Guidance

- to support using the practice test as an instructional tool
 - how to use and not use
 - interpreting and using results
 - collaborative scoring process

LEAP 2025 Practice Test Best Uses

- Examine the content to evaluate instruction and assessments.
 - Compare the approach on the practice test to your approach to instruction and assessments.
 - Use as a basis of comparison for purchased and open-source assessments.
 - Examine and use rubrics/scoring notes to better understand the expectations for constructed- and extended-response items.
- Simulate testing conditions **within regular class time** to help students feel prepared for actual test administration.
 - Facilitate testing discussions between teachers and students.
 - Have students practice timing and pacing.
 - Have students practice with the test mode format—PBT or CBT.
- Examine the format to design instructional tasks and classroom assessments that use similar features.
 - Sequence questions in meaningful ways.
 - Incorporate set-based assessments
 - Incorporate practice test items into instruction.

LEAP 2025 Practice Test Cautions

- Do not alter classroom and school schedules to administer the practice test.
- Do not administer all sessions within a single day; sessions can be administered individually over the course of the school year.
- Avoid timing all assessments.
- Avoid spending too much instructional time practicing for the assessment; the **best test prep is high-quality instruction**.
- Avoid prioritization of content based on the LSSS included on the practice test because **it does not necessarily represent all of the content** eligible for the operational test.
- Do not use the practice test to gather cumulative data about overall student performance and preparedness. Items on the practice test have not gone through the same review process as the LEAP 2025 operational test items, such as field-testing and data review.
- Be careful not to overwhelm students with testing time and item types. Instead, focus time on providing rich learning experiences so students are prepared with content knowledge and skills.

LEAP 2025 Practice Test Webinars

Who	DTCs, STCs, and Supervisors	Teachers and Supervisors
What	Learn general information about reference materials, and test set-up, administration, scoring, and reporting	Learn general information about resources, and specific information about best uses and common misuses
When	The same webinar is offered 3 times in the year:	
	<p>October 3, 2018 @ 11:30 am October 16, 2018 @ 9:30 am January 9, 2019 @ 11:30 am</p>	<p>October 3, 2018 @ 4:00 pm October 16, 2018 @ 3:00 pm January 9, 2019 @ 4:00 pm</p>

LEAP 2025 Practice Test Webinars

To Join:	DTCs, STCs, and Supervisors	Teachers and Supervisors
October 3	https://ldoe.zoom.us/j/689628154 Telephone: 669-900-6833 Meeting ID: 689628154	https://ldoe.zoom.us/j/647834264 Telephone: 669-900-6833 Meeting ID: 647834264
October 16	https://ldoe.zoom.us/j/645134288 Telephone: 669-900-6833 Meeting ID: 645134288	https://ldoe.zoom.us/j/222125262 Telephone: 669-900-6833 Meeting ID: 222125262
January 9	https://ldoe.zoom.us/j/993597977 Telephone: 669-900-6833 Meeting ID: 993597977	https://ldoe.zoom.us/j/175295115 Telephone: 669-900-6833 Meeting ID: 175295115

Eagle Assessment Items

Available Now

- Grade 3: 1 item set
- Grade 4: 6 stand-alone items
- Grade 5: 1 item set
- Grade 6: 1 item set
- Grade 7: 1 item set
- Grade 8: 1 item set
- Physical Science: 6 stand-alone items
- Biology: 6 stand-alone items

Coming Winter 2018

- Grades 3-8: 15 stand-alone items and 3 item sets each
- Biology and Physical Science: 15 stand-alone items and 3 item sets each

LDE Implementation Plan and Support

The Department is working to find a comprehensive solution for districts and schools regarding quality science curriculum.

- We are reviewing programs at every grade level and grade band
- We are working with developers to get potential Tier 1 programs through the reviews and providing feedback for developers to update programs that are close to quality

Professional Development Opportunities

- Great Minds: 4th Grade Tier 1 Curriculum
 - One day trainings: September 25-27 (Baton Rouge and New Orleans)
 - Additional one day trainings are being added to the schedule
- Inquiry Hub: High-Quality Biology Units
 - Additional one day trainings are being added to the schedule

Contact Information

Contact Lydia.Hill@la.gov with questions regarding instructional support

Contact Assessment@la.gov with questions regarding assessment support