nweo State Solutions

Louisiana and NWEA: Creating innovative assessments to foster equity and deeper learning



Since 2018, the Louisiana Department of Education (LDOE) and a host of partners, including NWEA, have been collaborating on the development and delivery of an interdisciplinary, curriculum-aligned assessment. Designed for English language arts (ELA) and social studies, the assessment is part of Louisiana's participation in the US Department of Education's Innovative Assessment Demonstration Authority (IADA) program.

History and context

The Louisiana IADA pilot originated from Louisiana educators' commitment to engaging students in deeper learning and making accountability assessments more equitable and relevant to instruction. To support deeper learning in ELA, the LDOE established a content-rich curriculum through its ELA Guidebooks, with knowledge domains as a foundation and units built around general themes and texts. As students increase their background knowledge by reading assigned texts within an instructional unit, they become better prepared to access more complex texts and subjects over time.

The LDOE understands the critical role of assessments—along with standards, curriculum, and teacher training—in signaling what matters most in the classroom. However, they observed a challenge with the focus in state ELA assessments on measuring specific skills, such as summarizing passages and locating main ideas, without assessing whether students have developed a base of knowledge. This can lead many educators to focus on discrete reading skills alone, which is problematic, as research shows that students need deep knowledge of a subject in order to effectively read and think critically about it. The other challenge the LDOE identified with traditional ELA tests was that they often assume a certain level of background knowledge that not all students have had the opportunity to attain, creating a potentially inequitable testing experience.

Louisiana believed that building assessments in a new way—bringing ELA and social studies standards, curriculum, and assessments into full alignment—would make academic systems more instructionally responsive and promote deeper engagement with texts in the classroom. By using passages from books students in grades 6–8 have read as part of the curriculum, the assessments would provide a more equitable experience, supporting equal opportunity to demonstrate achievement.

The vision

As the first state approved by the IADA to pursue an innovative assessment pilot, Louisiana focused on better aligning state assessments used for accountability with their core beliefs on assessment and instruction:

- **Equity:** Assessments should allow all students the opportunity to demonstrate what they know and can do.
- Opportunity: All students deserve access to complex texts and tasks.
- **Alignment:** Assessments should support high-quality instruction.
- Knowledge: To become literate, students must build knowledge through coherent units
 of study.

As part of the approval process, Louisiana invited NWEA to create the Louisiana Innovative Assessment Consortium in 2018. Since then, NWEA has been collaborating with the LDOE and a group of extraordinary organizations to implement this state's vison. The consortium, under the guidance of the LDOE, consists of the Center for Assessment, the Johns Hopkins Institute for Education Policy, Odell Education, MZ Development, Strategic Measurement and Evaluation, and NWEA.

LOUISIANA IADA ASSESSMENT

- Grades 6-8
- Interdisciplinary (ELA and social studies)
- · Curriculum integrated
- Through-year model
- Machine scored and constructed response

Innovative test design

The Louisiana innovative assessment pilot has a test design that is unlike any other state assessment used in the nation. It employs a curriculum-integrated through-year approach consisting of several assessments administered throughout the school year, so educators and students receive ongoing feedback to inform teaching and learning. The assessment is explicitly aligned to the ELA and social studies curriculum content that the students have studied. It measures both content knowledge and skills students derive from studying specific texts.

The assessment also builds directly on international performance data and the most compelling research in the science of learning, including critically important domains such as short- and long-term memory, neural plasticity, and the development of metacognitive skills.

Students take a unit assessment each term (fall, winter, and spring), one of which draws from both the ELA and social studies units of study. In the spring, students also take an ELA end-of-year essay and a social studies supplement (see figure 1).

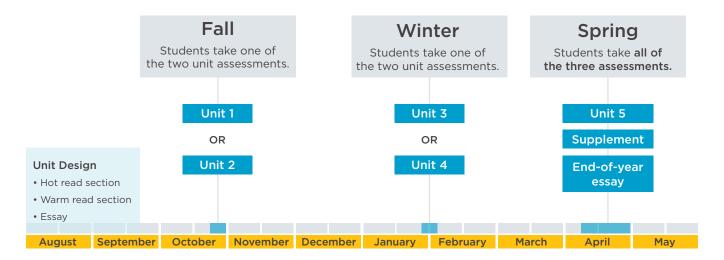


Figure 1. The Louisiana innovative through-year assessment model

Key features of the assessment include:

- 1. A unique fusion of interim and summative assessment elements.
- 2. The use of curriculum-specific anchor texts as the core of the assessment design.
- 3. Machine-scorable and constructed-response questions that assess students' grasp of the vocabulary, meaning, concepts, and plot of their readings.
- 4. "Hot reads," which are texts that are part of the curriculum so that every student has the same background knowledge about a particular subject.
- 5. A "warm read," which is related to the same subject as the "hot read" but new to the student. In the "warm read" section, the student has the ability to show how they can extend knowledge obtained through the unit of instruction.
- 6. Questions that require students to integrate understanding derived from classroom texts with new perspectives from the "warm reads," thus "stretching" students' capacity to synthesize related concepts.
- 7. An end-of-year synoptic essay—the first inclusion of such in a high-stakes American assessment—that requires students to use what they learned throughout the year to address a single, probing issue.
- 8. A component that requires students to draw on their ELA and social studies readings and combine the resulting knowledge to address a variety of questions. This incorporates a humanities concept into the assessment.



Timeline of activities

Year one

In the initial year (2018-19), the Louisiana Innovative Assessment Consortium recruited participating districts, developed an assessment design, and created content. Two trials were conducted—one in the winter and one in the spring. Data analyses were used to adjust the content and test design. During the summer of 2019, administrators and teachers from the participating districts were provided professional development focused on the test design and the transfer of knowledge.

Year two

In 2019-20, the innovative assessment was operationalized for grade 7, the pilot was expanded to grades 6 and 8, and grade 7 content was replenished. Three assessment windows were defined-fall, winter, and spring. The fall window focused on grade 7 operational assessments only, while the winter window saw the expansion of the pilot to grades 6 and 8. Over 15,000 students participated in the winter window—an increase of nearly 200% in voluntary participation rates.

The results of both the fall and winter windows were evaluated, and data from those analyses were provided to the content team. End-of-unit reports were designed and developed, data validation procedures were put in place, and end-of-unit reports were released after both the fall and winter windows. In addition, design work was initiated on the end-of-year report. Based on challenges caused by the COVID-19 pandemic, the state elected not to administer the operational grade 7 assessment or the field tests for grades 6 and 8 in spring 2020 and paused the pilot through the 2020-21 school year.

Year three and beyond

The LDOE intends to resume the pilot and complete a full year of testing during the 2021-2022 school year. In the meantime, the Louisiana Innovative Assessment Consortium will engage with various stakeholders, including participating districts, to focus on program-evaluative questions for the score reports. These questions include:

- 1. How useful are assessment results/reports for adjusting instruction in subsequent units? How can existing reports be revised to maximize their utility for adapting instruction in future units?
- 2. How do teachers make sense of the information on score reports? How do they interpret information/scores? Are teachers interpreting scores correctly or as intended?
- 3. How do teachers and administrators use the information on score reports? To what extent is actual use aligned with intended use?

The team will focus on implementing data collection and analyses procedures to answer these questions, which will involve the collection of interview, survey, and document data.

Other areas for exploration include scoring and professional development. As a large portion of the points on end-of-unit assessments are currently hand scored, an area for further investigation is the use of automated scoring for both the constructed-response and essay items. Plans are in place to utilize the data already captured to train an artificial intelligence engine to support this effort. Additional analyses will be required to allow the program to minimize the time and costs associated with hand scoring. Analysis of current professional development is planned to determine what is successfully supporting teachers and what is not working.



Findings to date

Teachers, administrators, and students have provided positive feedback on Louisiana's innovative assessment. Many students reported that it more closely matched their instruction and they felt less anxious while testing. Teachers indicated that this new approach is a better measure of what is being taught-in particular, the focus on higher-order thinking skills and the ability to transfer knowledge across texts.

The innovative assessment differentiated between students, as a range of points were earned across the assessment (students scored at the low, middle, and high ends of the range). Assessment results illustrated that while students are doing a good job of answering questions focused on individual texts, they are struggling to 1) make connections between texts studied in class and related texts ("warm reads") and 2) analyze and synthesize concepts presented across texts on the essay test. To help address these challenges, professional development activities will likely be adjusted, with a strong focus on helping teachers "teach knowledge" and inclusion of tools to support writing in the classroom.

Notably, preliminary analysis of early data indicates that at least a portion of what has historically been described as an achievement gap amongst socioeconomic groups may be partly attributed to an "opportunity gap." Table 1 compares the achievement gaps between students who are economically disadvantaged and those who are not for the traditional ELA state test administered in spring 2019 and the innovative tests administered in fall 2019 and winter 2020. The gap between students who are economically disadvantaged and those who are not is between 0.05 to 0.08 standard deviation units smaller on the innovative state tests. The new test design may be "leveling the playing field" by providing students a more equitable opportunity to show what they know.

Table 1. Achievement gap comparisons for traditional vs. innovative ELA tests in Louisiana

	Number of students		Effect size: economically disadvantaged minus non-economically disadvantaged		
	Economically disadvantaged	Non-economically disadvantaged	Grade 6 Traditional test Spring 2019	Grade 7 Innovative test Fall 2019	Grade 7 Innovative test Winter 2020
Giver (fall 2019) and A Christmas Carol (winter 2020)	2219	812	-0.73	-0.68	-0.67
Written in Bone (fall 2019) and Giver (winter 2020)	1456	622	-0.69	-0.61	-0.61

Initial data also indicates that, compared to a typical Louisiana state accountability test, the new innovative assessment design has improved student engagement. As shown in Table 2, the percentage of students who engaged through at least 90% of the test improved by a ratio of 5:1. The percentage of disengaged economically disadvantaged students dropped by 19%. Similarly, the percentage of disengaged African American students dropped by 21.2%. This same pattern holds for White students, where disengagement dropped by 14.2%.

Table 2. Test disengagement comparisons for traditional vs. innovative ELA tests in Louisiana

			Grade 6 Traditional test	Grade 7 Innovative test	Grade 7 Innovative test
Variable	Subgroup	N	% disengaged Spring 2019	% disengaged Fall 2019	% disengaged Winter 2020
Gender	Female	2731	18.1	2.4	2.6
	Male	2862	20.8	5.2	4.6
Ethnicity	Hispanic	204	27.9	6.9	3.4
	Native American	83	37.3	24.1	12.0
	Asian/Pacific Islander	62	16.1	1.6	0.0
	African American	2426	23.3	4.3	4.3
	White	2725	14.6	2.6	2.9
	2 or more races	93	25.8	3.2	4.3
*ED	Yes	3916	21.6	4.4	4.4
	No	1677	14.5	2.4	1.9
*ELL	Yes	65	30.8	16.9	7.7
	No	5528	19.3	3.7	3.6
*Disability	Yes	652	26.4	10.4	8.1
	No	4941	18.5	3.0	3.1
*Performance level	Unsatisfactory	421	33.5	16.9	14.0
	Approaching basic	1743	18.6	2.2	2.8
	Basic	1301	25.4	5.4	5.0
	Mastery	1877	14.1	1.5	1.7
	Advanced	251	10.8	2.8	0.4

Note: *Based on grade 6 designations

With preliminary analysis indicating that the innovative test design may increase student test engagement and result in a more equitable assessment for all students, NWEA anticipates investigating potential changes to test designs in other content areas to ensure that assessments are more equitable and engaging for all students.

To better foster student learning, rethink state assessment in partnership with NWEA.

Together, we can create equity in opportunity and outcomes for all students.

