Louisiana Believes

2021-2022 - Supporting High-Quality Science Instruction through Curriculum and Professional Development

November 6, 2020

SUPER APP

DEPARTMENT of EDUCATION

Super App Timeline

Date	Item
November 6, 2020	Super App and school system planning resources released
February 5, 2021	Super App submitted to LDOE
March 2021	LDOE provides feedback to school systems on alignment to CIR/UIR-Academics approval and funding requirements
	School systems submit revised Super App to LDOE, as applicable
April 20, 2021	Competitive funding allocations submitted to BESE for approval

Super App Launch Materials

All 2021-2022 Super App and school system planning materials can be found in the Department's School Improvement Library.

To access the presentation recordings, please click on the image below.

Objectives

School system planning teams will:

- Understand the high-quality science curriculum and professional development options eligible in Super App and the logistics to access pricing and additional information.
- Understand Science Content Leaders and funding eligible in Super App.

Leaders of improving schools ensure that:

All students learn grade-level content alongside their peers. Students with unfinished learning are provided additional support focused on preparing them to achieve mastery of grade-level content.

High school students have graduation plans aligned to coursework and credentials relevant to life after high school including AP, IB, dual enrollment, and statewide industry credentials.

Groups of teachers including core, special education, English language, and reading interventionists collaborate weekly.

An established Instructional Leadership Team meets weekly focused on improving student outcomes through systems and structures.

All educators and students are afforded equitable access to opportunities in the learning environment and treated with dignity and respect.

Structures

Improving schools implement three foundational structures to drive professional and student growth.

Instructional Leadership Teams

✓ **Instructional Leadership Teams develop a long-range plan for improving educator and student outcomes.**

Weekly meetings focus on reviewing teacher and student data that align with improving classroom instruction, incorporating best practices for high-impact leader actions, and planning for regular, high-quality feedback and support through an observation and feedback cycle for educators.

Learning Communities

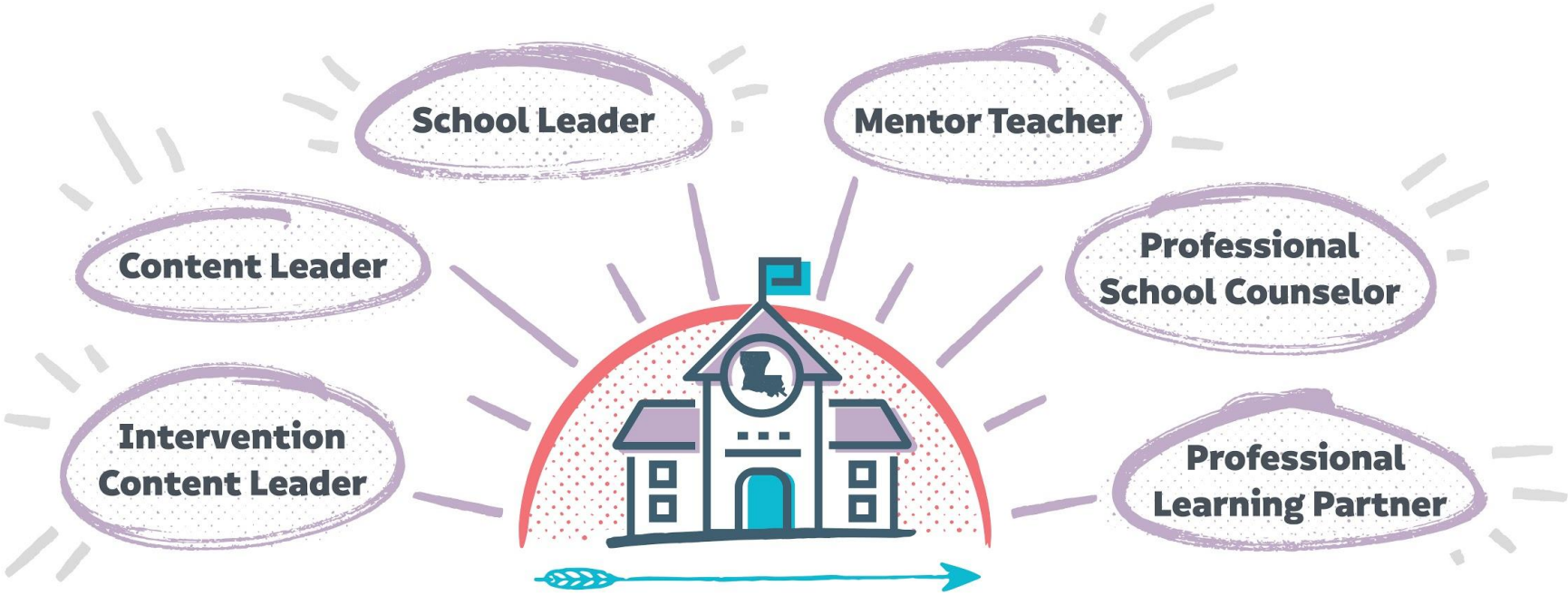
✓ **Learning communities are established to provide weekly collaboration time for groups of teachers including core, special education, English language, and reading interventionists.**

Teachers and the Instructional Leadership Team plan for the use and implementation of high-quality curriculum, share best practices for teaching and learning, plan for individual lessons with embedded supports to address unfinished learning, and study the units within the curriculum. Learning Communities can be implemented in a variety of structures such as common planning time, student and teacher data analysis, teacher support, professional learning partner partnerships, and the use of on-campus leaders such as Content Leaders, Intervention Content Leaders, and Mentor Teachers.

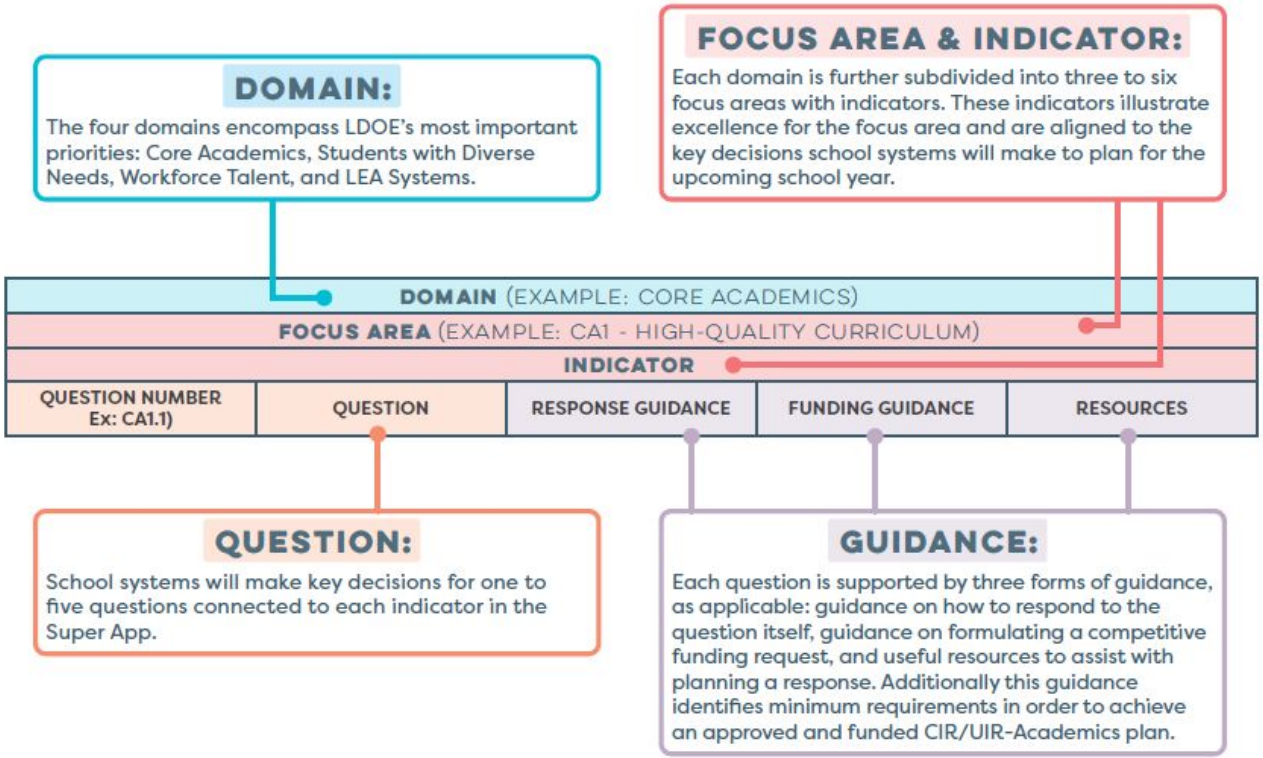
Observation and Feedback Cycles

✓ **Observation and Feedback Cycles, led by the Instructional Leadership Team, are frequent and cyclical.** The collection and analysis of data around those observations and high-quality coaching focus on improvements in instructional practices and student outcomes.

Each leader within the school plays a role in supporting teachers to improve outcomes for their students.



School System Planning Framework



Core Academics

This session will provide information related to the School System Planning Framework area(s) below.

CA1	**High-Quality Curricula**	
	Indicator	**Application Question**
	Teachers in all grade levels and core content areas have access to and implement a high-quality curriculum.	2. Which specific science curricula will be used in each grade band at CIR/UIR-Academics schools?

Core Academics

This session will provide information related to the School System Planning Framework area(s) below.

CA2	**High-Quality Teacher Professional Development**	
	Indicator	**Application Question**
	Teachers in all grade levels and core content areas receive orientation to the curriculum, content module redelivery, opportunities to prepare for units and lessons, and ongoing support.	3. Which partner(s) will provide science teacher orientation to curricula and in-school coaching on the curricula in each grade band at CIR/ UIR-Academics schools?

Workforce Talent

This session will provide information related to the School System Planning Framework area(s) below.

WT2	**Educator Leadership and Support**	
	Indicator	**Application Question**
	School systems are building opportunities for advancement and support through Mentor Teacher, Intervention Content Leader, and Content Leader roles at all schools.	4. How many teachers will participate in Science Content Leader training?

Today's Agenda

I. High-Quality Science Curriculum and Professional Development
II. Science Content Leader
III. Closing

High-Quality Science Curriculum (CA1.2) and Professional Development (CA2.3)

Shifts in Science

Because school systems are committed to getting high-quality instructional materials for their students and teachers, it is crucial to understand what separates high quality from low quality. The following shifts should be the highest priority when selecting instructional materials:

- Apply Content Knowledge
- Investigate, Evaluate, and Reason Scientifically
- Connect Ideas Across Disciplines

These shifts help you understand how high-quality instructional materials support teachers as they implement the Louisiana Student Standards for Science into their classrooms.

High-Quality Science Curriculum

The following science instructional materials* are closely aligned to the Louisiana Student Standards for Science and will be prioritized via Super App.

Grades	Program
K-5	PhD Science
	Amplify
6-8	OpenSciEd
	Activate Learning IQWST
HS	inquiryHub Biology

*as of November 2020

Professional Development

School systems may request competitive funds for professional development on high-quality science curriculum at CIR/UIR-Academics schools that is conducted by a vendor in the PD Vendor Guide.

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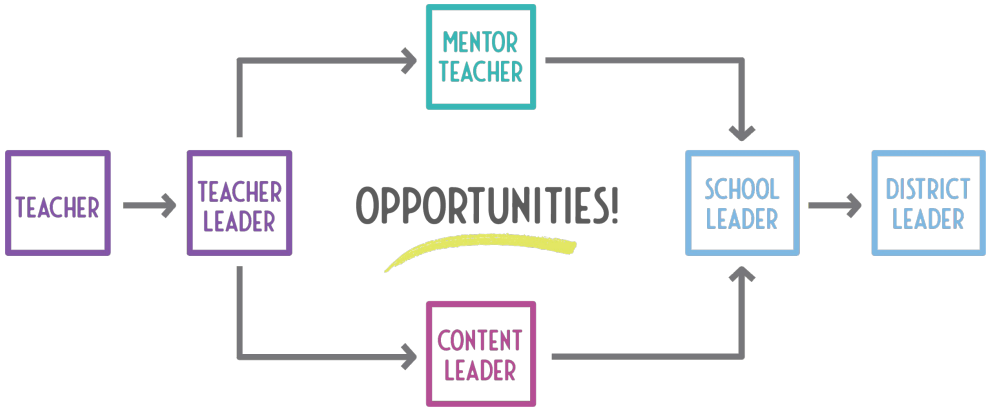
Science Content Leader (WT2.4)

Louisiana Content Leaders

The Louisiana Content Leader Initiative provides content-rich and curriculum-specific professional development and creates leadership pathways for talented local educators.



Science Content Leader Goals

Science Content Leaders:

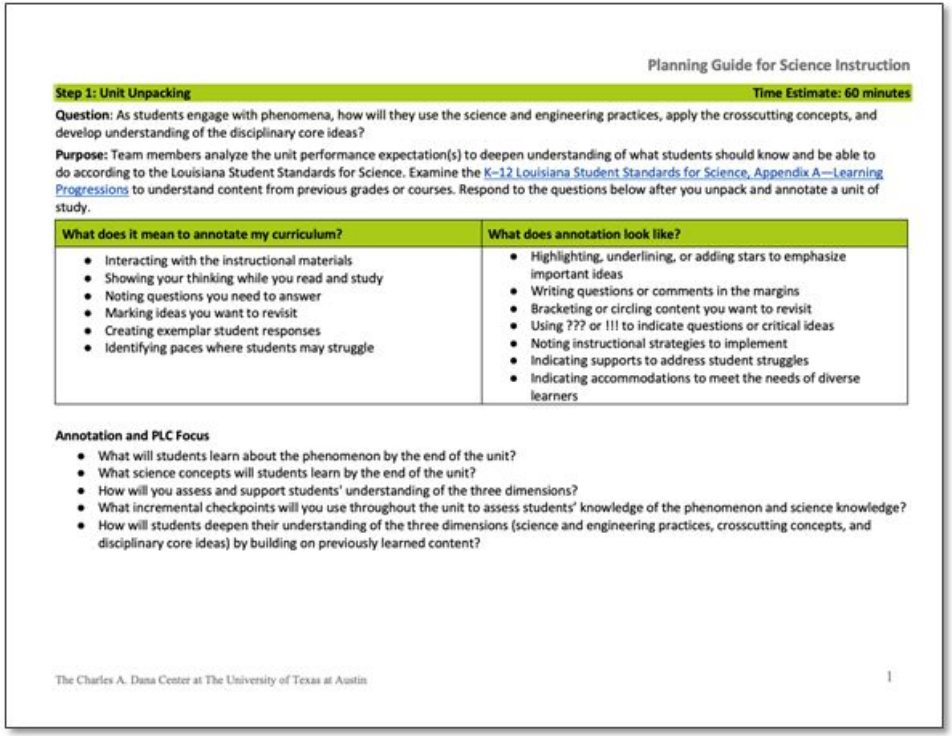
- Deeply understand the Louisiana Student Standards for Science (LSSS) and associated shifts as well as the vision for science education set forth by *A Framework for K-12 Science Education.*[1]
- Deeply understand the essential elements of high quality science curriculum (explaining phenomena and designing solutions, three-dimensional teaching and learning, and authentic engagement in reading, writing, and speaking).
- Are highly prepared to employ pedagogical strategies and classroom routines that focus on promoting coherence, meaningful and productive discourse, incremental sensemaking, and equitable learning for all students.
- Apply best practices of adult learning and content expertise.

[1]*National Academies Press Consensus Study Report (2012)*

Science Content Leader

Through Science Content Leader training, participants:

- learn strategies for instructional decision making that promote three-dimensional instruction, sensemaking, discourse, and equity
- prepare to lead colleagues in effective common planning structures and routines



Planning Guide for Science Instruction

Step 1: Unit Unpacking **Time Estimate: 60 minutes**

Question: As students engage with phenomena, how will they use the science and engineering practices, apply the crosscutting concepts, and develop understanding of the disciplinary core ideas?

Purpose: Team members analyze the unit performance expectation(s) to deepen understanding of what students should know and be able to do according to the Louisiana Student Standards for Science. Examine the K–12 Louisiana Student Standards for Science, Appendix A—Learning Progressions to understand content from previous grades or courses. Respond to the questions below after you unpack and annotate a unit of study.

What does it mean to annotate my curriculum?	What does annotation look like?
• Interacting with the instructional materials • Showing your thinking while you read and study • Noting questions you need to answer • Marking ideas you want to revisit • Creating exemplar student responses • Identifying paces where students may struggle	• Highlighting, underlining, or adding stars to emphasize important ideas • Writing questions or comments in the margins • Bracketing or circling content you want to revisit • Using ??? or !!! to indicate questions or critical ideas • Noting instructional strategies to implement • Indicating supports to address student struggles • Indicating accommodations to meet the needs of diverse learners

Annotation and PLC Focus

- What will students learn about the phenomenon by the end of the unit?
- What science concepts will students learn by the end of the unit?
- How will you assess and support students' understanding of the three dimensions?
- What incremental checkpoints will you use throughout the unit to assess students' knowledge of the phenomenon and science knowledge?
- How will students deepen their understanding of the three dimensions (science and engineering practices, crosscutting concepts, and disciplinary core ideas) by building on previously learned content?

The Charles A. Dana Center at The University of Texas at Austin 1

Science Content Leader

CIR and UIR-A schools may request optional competitive funds for a Science Content Leader.

Consult the Mentor Teacher/Content Leader Vendor Guide for details on training, pricing, and contact information for each approved vendor.

Approved Science Content Leader Providers

Charles A. Dana Center at the University of Texas

Great Minds (PhD Science)

SchoolKit

Today's Agenda

I. High-Quality Science Curriculum and Professional Development
II. Science Content Leader
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Super App Funding for Science

School systems with CIR and UIR-Academics schools may request funding for high-quality science curriculum, professional development, and Science Content Leaders via Super App. In order to be eligible to receive optional science funding, school systems who request funding for science curriculum are required to also identify professional development from vendors in the PD Vendor Guide, and should consider training Science Content Leaders to ensure teachers are supported adequately during curriculum implementation. High-quality science curriculum is not mandatory for CIR/UIR-Academics schools but is highly encouraged.

Super App Support

Support for completing the Super App will be provided through:

- School Improvement Library
- LDOE Weekly Newsletters
- System Leader Monthly Calls
- Super App Planning Support Calls
- School System Relations Team
- Office Hours on scheduled Fridays at 10 a.m. (details via LDOE Weekly Newsletter)

Send all questions related to school system planning and Super App to LDOE.grantshelpdesk@la.gov and include “Super App” in the subject line.