


# Math Content Leader Assessment Series

## Demonstrating Math Content Knowledge




Educators with high expectations for student outcomes will connect deep mathematical content and an understanding of the Louisiana Student Standards for Mathematics (LSSM) to the planning and implementation of a Tier 1 math curriculum. Within a Tier 1 curriculum, the educator will apply their knowledge of the key shifts in the mathematics standards: focus, coherence, and rigor.

Doing so will allow them to engage in purposeful, collaborative planning while implementing the curriculum within the classroom and with fidelity.

- **ANALYZE** a lesson from a Tier 1 math curriculum to demonstrate your knowledge of the Key Shifts in Mathematics.
- **DEVELOP** a set of instructional decisions aligned to the [planning guide](#) to ensure focus, coherence and rigor.
- **IMPLEMENT** the lesson you planned and collect student work samples.
- **EVALUATE** the implementation of your lesson by responding to reflection questions.

## Facilitating Mathematically Productive Discussions




As the standards for mathematics have shifted from primarily routine procedures and algorithms to also include building conceptual understanding, students must be able to reason, justify, and model their thinking in mathematics. Achieving this requires that educators also shift their instruction so that students are doing more of the cognitive lift. Productive discourse is an instructional tool that facilitates this by allowing educators to use students' developing thinking to help others master the content.

Productive discourse also helps educators collect important information about what students are thinking and learning that can be used to adjust instruction. A key component of productive discussion is educator facilitation.

The 5 Practices for Orchestrating Mathematically Productive Discussions provides a framework that can help educators improve the quality of mathematics discussion in their classrooms.

- **ANALYZE** a selected lesson from the Tier 1 math curriculum to prepare to lead a mathematically productive discussion in your class.
- **DEVELOP** or use the provided monitoring sheet to monitor, select, sequence and connect students' solution pathways.
- **IMPLEMENT** the lesson and capture a video that demonstrates your discussion facilitation.
- **EVALUATE** the implementation of your lesson by responding to reflection questions.

## Coherence and Alignment of the LSSM




Mathematics is not a list of disconnected topics, tricks, or mnemonics; it is a coherent body of knowledge made up of interconnected concepts. The educator connects deep mathematical content knowledge and understanding of the Louisiana Student Standards for Mathematics (LSSM) to the planning and implementation of a Tier 1 math curriculum. When educators understand the coherence of the LSSM, they are able to make connections explicit in their lesson design and delivery. They also gain competency in scaffolding knowledge for students within and across lessons and grade levels, resulting in increased student achievement in math.

- **ANALYZE** a sequence of connected lessons (minimum of 3 lessons).
- **DEVELOP** an intervention plan to support student mastery through a series of lessons.
- **IMPLEMENT** the series of lessons and collect student work samples.
- **EVALUATE** the implementation of your lesson by responding to reflection questions.

*Select one Choice micro-credential to complete*


## Leading Common Planning Time



Common Planning Time is essential to establishing a culture of collaboration and continuous improvement which leads to equitable and effective classroom instruction. During Common Planning Time, teachers should be working alongside grade-level, content-area peers to prepare units and lessons using their curricular materials.

- **ANALYZE** the ways in which you, in your role as a Content Leader, can contribute to specific school goals related to implementing curriculum.
- **DESIGN** Design an agenda for the upcoming Common Planning Time session (no longer than 2 pages in length).
- **IMPLEMENT** your plan and collect artifacts of implementation.
- **EVALUATE** the implementation of your plan by responding to reflection questions.

## Facilitating Adult Group Learning



Facilitating adult group learning requires a strong grasp of content, purposeful planning, and methods to assess the impact of that learning. The plan and facilitation of an adult group learning session incorporates effective learning models, structures, and processes. When adult learners are engaged in experiential learning that links directly to their professional learning needs, instructional practices improve and have a direct impact on student achievement.

- **ANALYZE** an upcoming opportunity to (re-)deliver a content module.
- **DEVELOP** annotations for a Facilitation Guide to ensure successful facilitation of the content module.
- **IMPLEMENT** your content module session and capture a video that demonstrates your facilitation.
- **EVALUATE** the success of your facilitation by responding to reflection questions and collecting participant feedback.