LOUISIANA DEPARTMENT OF EDUCATION

Science Lesson Preparation Protocol

When analyzing the backward design of science curriculum units, it is important to understand how to plan at the lesson level. Curriculum-embedded assessment moments are tools to help teachers determine whether students will be successful on the end-of-unit assessment. This means that understanding how to support students along the way is essential when planning at the lesson level.

Preparing to Teach a Lesson

Step One: Review Unit Study Tool

- [ ] Review the completed unit study tool for the unit you are instructing.
- [ ] As you complete step two, evaluate the connection between the lesson objectives and the three dimensions of the performance expectations you uncovered during the unit study.

Step Two: Prepare to Support All Students with Lesson Annotations

Phase One: Initial Analysis

- [ ] Determine the purpose of each activity (what students are doing and what they should figure out) within the lesson and how they relate to each dimension of the focal performance expectation(s) of the lesson.
- [ ] Identify and complete any identified major assessment opportunities in the unit through the lens of a student.
- [ ] Identify student exemplar responses for written and spoken expressions of understanding to serve as student look-fors. Create these when not available within the curriculum.

Phase Two: Advanced Analysis

- [ ] Identify possible student competing ideas.
- [ ] Develop additional questions to provide in-the-moment supports as needed, based on student look-fors and anticipated student competing ideas.
- [ ] Identify at least one lesson-level assessment opportunity and how it will be used to inform future instructional decisions.
- [ ] Consider curriculum-provided supports for diverse learners, how these meet the needs of the class, and what additional strategies may be needed.
- [ ] Identify areas in the lesson that may require timing adjustments and access your curriculum-embedded resources to address unfinished learning using the LSSS Learning Progressions (Appendix A).
- [ ] Identify instructional routines that will be used to facilitate student learning during lesson components.

There may be times, as indicated above, when teachers need to make adjustments to the lesson to meet the specific needs of their unique student populations. When these changes are made, teachers should justify the need for these changes by providing a rationale for the adjustments.

Step Three: Materials Matter

- [ ] Prepare all hands-on materials for the lesson and ensure they are readily available to students, including identifying a procedure for distributing, engaging with, and collecting materials.
- [ ] Study any necessary resources to build teacher background knowledge.
- [ ] Identify the necessary teacher materials for the lesson and ensure they are readily available.
- [ ] Create and display anchor charts or additional classroom visuals to support students with the day's lesson.
- [ ] Ensure that the necessary technology is in place to enable students to engage in the lesson fully.