

Learning Progression: Sced 481

Materials:

Grade level:

Prerequisite skill:

Learning Target:

Instruction needs to be focused on a limited number of "Big Ideas" guided by the NGSS. These big ideas need to be unpacked into clear learning targets and success criteria.

Success Criteria:
I can develop a learning progression that clearly outlines learning targets, success criteria, and formative assessment tasks.

Formative Assessment:

Learning Progression

Learning Target:

Instruction needs to begin with capturing what students already think and know

Success Criteria:
I can identify common misconceptions that students have. I can use a variety of techniques to capture my students' thinking before a unit/lesson.

Formative Assessment:

Preconception assignment
Revised lesson

Learning Target:

Student learning experiences must be fully steeped in the NGSS, must allow students to construct their own understanding, and must allow students the opportunity to make sense of their learning.

Success Criteria:
I can identify NGSS performance expectations, DCI, practices, and crosscutting concepts for a topic. I can develop an inquiry-based lesson that helps students construct understanding..

Formative Assessment:
Standards assignment
Revised lesson

Learning Target:

Formative assessment elicits evidence of learners' achievement (tied to learning targets) and requires effective feedback.

Success Criteria:
I can utilize different forms of formative assessment.

Formative Assessment:

Assessment probe
Revised lesson

Learning Target:

Reflection and sense-making are an integral part of the learning process (Students engaged in metacognitive thinking)

Success Criteria:
My students and I can utilize results of assessment tasks to direct future actions. Students can reflect on their own learning; comparing what they know now with what they knew before, and where they still need to go.

Formative Assessment:
Reflective essay

Big Idea:
Increased student achievement in science results from effective use of research-based learning strategies (i.e., those incorporated in the learning cycle and How People Learn)

Later big ideas that build on this big idea include: