

Best Instructional Practices

in Tier 1 Science Classrooms





Questions for Reflection

Are ALL of these components incorporated into your lesson plans and discussed during PLC?

Engaging Essential Questions?

Do the essential questions engage students by helping them make connections to important ideas?

Formative Assessments?

Are students being provided with data-based coaching and immediate feedback using a variety of tasks?

Aligned with the Standards of Learning?

Are the objectives for my science lesson aligned with the VDOE Framework guide?

Alignment of Assessments?

Are summative assessments aligned with the Standards of Learning for that unit?

Adjusting Instruction?

Is instruction being planned and adjusted using formative and summative assessments as feedback?

Objectives



Must Haves

Objectives must be formulated so that students understand the expectations regarding the **behavior**, the **condition** and the **criteria** of each lesson.



Behavior/Intention

The first part of the objective must list the behavior. What are the **standards** the students will be learning? What **cognitive level** will the focus be?

I can
describe/explain/identify....



Condition/Performance

The second part of the objective must describe **what** the students are going to do during the lesson.

I will
engage/participate/demonstrate...



Criteria/Mastery

The last part of the objective must be **measurable** and **quantifiable**.

Ex: ...students will label correctly
3 out of 4 parts of an atom.



Example of an Objective:

I will create a diagram and label the parts of a light wave using the words: wavelength, crest and trough.

Intention (Behavior): I will create a diagram...

Performance (Condition): ...and label the parts of a light wave...

Mastery (Criteria): ...using the words: wavelength, crest and trough.



ACPS Comprehensive Science Instructional Framework

Framing the Learning & Activator Activity

Time: 10 mins.

Framing the Learning

- Review Objective
- Ask Essential Question

Activator Activities

- Flocabulary
- GLAD Observation Chart
- GLAD Chants
- Quizlet

Modeling

Time: 10 mins.

Mini-lesson with modeling of key skills essential to science content.

- Science Demonstration
- GLAD Pictorial Input Chart
- GLAD Inquiry Charts
- Virtual Labs
- Web-based Interactives/simulations

Guided and Independent Practice

Time: 20-30 mins.

Guided and Independent practice with ongoing formative assessment feedback.

- AVID Science LENSES
- STEAM activities
- Argument Driven Inquiry
- Jigsaw
- Nearpod
- WeVideo
- TinkerCad 3D Printing
- AVID Reflection Journal - answers the essential question
- Interactive Notebook

DON'T FORGET!

The Nature Center and Nature Trail are available to use throughout the school year.

- One permission slip/ per year is needed per student
- Classes can be scheduled at the Nature Center multiple times throughout the day (9am - 1:30pm)
 - Classes are co-taught by Nature Center employees
- Nature Center lessons are aligned to standards and transfer tasks
 - Classes can be scheduled same week

