Tips for Teachers:
Key Elements of Effective Lesson Delivery

Contents

The Power of Alignment

♦ *"The greater the alignment between the written and taught lesson, the greater the level of student learning…"*
Terri Mozingo, CAO

A Message from Dr. Terri Mozingo, Chief Academic Officer

We are pleased to share with ACPS educators this third in a series of *"Tips for Teachers."* These resource newsletters are designed to highlight key issues and focus areas in our K-12 classrooms.

This edition of *"Tips for Teachers"* focuses on what research and recent walk-through data suggest are "best practices" in lesson design and lesson implementation.

Researchers and international experts like Robert J. Marzano and Carol Anne Tomlinson are clear that certain elements in any effective lesson plan are universal.

Also, recent walk-throughs and instructional rounds in ACPS elementary, middle, and high school schools reinforce the value of Marzano, Tomlinson, and other researchers' recommendations for effective lesson planning and implementation:

1. **Alignment with Required Standards:** Ensure that the lesson is aligned with the curriculum pacing sequence and Virginia State Blueprint Frameworks.

2. **Clear Statement of Objective(s):** Frame the objective with behavioral verbs, performance conditions, and evaluation criteria (BCC).

3. **Use of Essential Questions (EQs):** Revisit open-ended questions aligned with lesson objectives, reinforcing the big ideas and the "why" and "how" of what students are learning.

4. **Activator and "Framing" Activities:** Use warm-ups to engage students' interest, activate prior learning, and make connections with their prior experience.

5. **Helping Students Move from the Concrete to the Representational and Abstract:** Begin by modeling, using tangible demonstrations of key skills or concepts. Then move students to acquire and integrate content in increasingly independent and generalizable ways.

6. **Clear and Engaging Pacing:** Consider the "10-2 Rule," ensuring that no more than 10 minutes of teacher-directed instruction occurs before students engage in one-on-one or small group interactions.

7. **Revisiting Objective(s) and EQs:** Help students to develop schema to organize their thinking and learning by revisiting lesson outcomes and big ideas.

8. **Focus on Formative Assessment Feedback and Coaching:** Throughout the lesson, provide students on-the-spot criterion-based feedback to help them monitor and adjust their learning.

9. **The Importance of Student Discourse and Self-Reflection:** The more active and engaged students are, the greater their levels of learning. Speaking and listening tasks accompanied by opportunities for self-reflection and self-assessment are critical.

10. **Meaningful Closure:** Lessons are like great narratives. They require a meaningful ending that allows students to reflect on how well they have achieved the lesson objectives—and pose questions for clarification.

Writing and Communicating Lesson Objectives

Clearly articulated objectives and essential questions are important parts of framing and guiding student learning.

The effective lesson objective clearly states for students the **specific skill or concept** they are expected to learn, the **conditions** under which they will confirm their learning, and the **evaluation criteria** for which they are responsible.

Objectives should be student friendly in their language while being challenging in their **cognitive complexity.** They should also reflect the highest level of Bloom's Taxonomy that students are expected to demonstrate by the conclusion of the lesson *(e.g., application, analysis, synthesis, evaluation, creative self-expression)*.

English Learner students also benefit from **academic language objective(s)**. These objectives identify key words and phrases essential to lesson understanding.

The Power of Essential Questions

Great essential questions help frame student learning and "unpack" the **compelling "Why?"** of the lesson.

When clearly presented in student-friendly language, essential questions can help to **organize student learning** and provide a **framework** within which to hold discrete knowledge and skills.

Great essential questions provoke **student inquiry, debate, and investigation.** They should revisit the universal issues and ideas at the heart of lesson and unit design:

1. **"Why?"** questions help students to analyze the purpose of what they are studying.
2. **"How?"** questions explore key processes.
3. **"To what extent?"** questions explore issues of degree, probability. or likelihood.

Activating Prior Knowledge and Engagement

"Teachers should ask themselves: What assumptions about learning underlie my choices? Can I explain the learning goals I have for my students? Do I explain to students the kinds of thinking and intellectual skills my activities require? Am I confident that I am maximizing the development of long-term skills and knowledge in each and every student? "

Doug Reeves, Where Great Teaching Begins

The beginning of a great lesson should engage student interest. A brief **"activator"** activity (lasting no more than five minutes) should **"hook"** students' desire to learn lesson content.

Through an engaging and experience-based activator task, students can explore the **purpose** of the lesson. They can also **activate prior learning** and demonstrate their readiness for learning new content.

The "activator" task can also provide the teacher with clear **formative assessment data** about what students know—or may be lacking—about requisite lesson skills and content.

Modeling, Shaping, Internalizing: The "CRA" Effect

An effective lesson ensures that students move from initial **acquisition** of new knowledge and skills toward growing levels of **independent use and transfer.**

Essentially, learning involves: (1) an initial **modeling** by the teacher of key lesson skills and/or content; (2) **shaping** activities that allow students to practice and rehearse using the new knowledge; and (3) gradual **"internalizing"** by students of vocabulary, concepts, and skills at a level of transfer.

Another way of describing this process involves the **"CRA" model.**

Essentially, teachers are encouraged to plan for three interrelated phases of student learning and progress: (1) **Concrete:** using tangible examples and modeling to introduce new learning; (2) **Representational:** creating symbolic or visual syntheses, moving students to increased understanding; and (3) **Abstract:** ensuring that students can apply knowledge with growing levels of transfer and generalization.

Effective Pacing of Learning Activities

The pacing of a lesson is an essential building block to promote student **engagement and motivation.**

As students move from modeling to shaping and internalizing (i.e., the CRA Model described previously), they should be at the **center of the lesson.**

An important and solidly research-based strategy is to follow the **"ten-two" rule:** Students should receive no more than ten minutes of teacher-directed or teacher-presented content before they are given a chance to **discuss, interpret, debate, or apply it.**

Pacing should follow a **logical sequence** that is clear to all students. It should also emphasize opportunities for students to **reflect on and respond to lesson essential questions.** Throughout the lesson, students should revisit the objective(s) and self-assess.

Effective lessons place the learner at the center of the learning process. Teacher talk and teacher-directed behavior are less evident than active student discourse, self-reflection, and small-group interaction.

Metacognition: Engaging Students in Self-Regulation

All students benefit from opportunities to activate and apply what researchers call their **"Executive Function"** skills.

Executive Function involves students' capacity for **self-regulation and self-management.** According to brain research, learners benefit from direct and intentional opportunities to set goals, establish a schedule, and use evaluation criteria to monitor their own progress.

Metacognition involves student opportunities to reflect on and evaluate such issues as the following:

1. **What** am I learning?
2. **Why** am I learning it?
3. For what **evaluation criteria** am I responsible?
4. What **questions** do I have that can help me improve my learning?
5. How can I **adjust my learning** to achieve my learning goals?

Diagnostic, Formative, and Summative Assessment

It has been said that **great teaching is—at its heart— great assessment.** The effective instructor is continually scanning the room to look for signs of student understanding—and to identify areas where one or more students may be struggling.

According to Connie Moss and Susan Brookhart in their best-selling *Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders* (ASCD, 2009), effective assessment addresses the following elements:

1. Shared **learning targets and criteria** for success
2. Feedback that **"feeds forward"**
3. Student **goal getting**
4. Student **self-assessment**
5. **Strategic** teacher questioning
6. **Student engagement** in asking effective questions

In effective lesson design, the teacher is continually **diagnosing** students' prior learning and areas in which they may lack background knowledge. **Re-teaching** should occur to address these gaps.

Formative assessment should underlie all parts of an effectively delivered lesson. Its purpose is to improve learning and student achievement. This on-the-spot and criterion-based feedback is carried out during the lesson—and should be **collaborative and fluid.**

When formative assessment is done well, teachers and students can use the evidence they gather (both formally and informally) to **make adjustments for continuous improvement.**

In a nutshell, students should continually be asked to reflect on the following questions:
1. Where am I going?
2. Where am I now?
3. What strategies can help me get to where I need to go?

Summative assessment measures students' culminating levels of proficiency. When it is effective, it encourages students to demonstrate understanding and transfer via a **rich range of performance-based assessment tasks as well as project-based learning.**

Student Discourse: Dignifying the Voice of the Learner

Research in the field of neuroscience is very clear about the power of student discourse: The more students engage in discussing and interpreting what they are learning, the greater their level of understanding and retention.

As suggested previously, an effective classroom honors the voice of the learner. Students should be continually debriefing on what they are learning and reflecting on its value, purpose, and meaning to them and their world.

Informal student discourse strategies can be as simple as a two-minute think-pair-share activity. However, students should also have the chance to engage in more complex discourse tasks such as:
1. Socratic Seminars
2. Debates
3. Panel Discussions
4. Oral Performance (e.g., Reader's Theatre, Literature Circles)
5. Multi-Media Presentations
6. Other Forms of Discussion and Inquiry (e.g., Simulations)

Closure: Recapping and Revisiting the Learning

An effective lesson should end with a meaningful and structured closure activity. Students benefit from such concluding activities as the following:
1. A chance to discuss and debrief on a lesson essential question
2. Opportunities to self-assess relative to lesson objective(s)
3. Interactive debriefings (e.g., a small group of partners): What have we learned today? Why was it important? What questions do we have?
4. Synthesis Activities: How does what we learned today relate to our prior work? What worked in today's lesson? What can we do to enhance our follow-up learning?

Every Student Succeeds

A Self-Reflection Questionnaire: How Effective Are My Lessons?

1. My lesson is clearly aligned with Virginia Standards of Learning and ACPS curriculum pacing.

2. I clearly state my objective(s) with higher-level behavioral verbs, conditions for performance, and evaluation criteria for which students are responsible.

3. I use one or more essential questions to help students understand and explore the big ideas, themes, and generalizations underlying the content we are studying.

4. My lesson always begins with an engaging "activator" to help students retrieve prior knowledge and understand what they are learning—and why they are learning it.

5. I design my lessons to help students move from the concrete to the representational and abstract. They move from initial modeling toward shaping and growing levels of transfer.

6. The pacing of my lesson is intentional and engaging for students. I follow the "10-2" rule by ensuring that no more than 10 minutes of teacher-directed instruction occurs before students have time for self-reflection, discussion, and application.

7. Throughout the lesson, I revisit with my students our objectives(s) and essential question(s). These become conceptual organizers to help students see connections, patterns, and meanings.

8. Throughout my lesson, I use formal and informal formative assessment tasks to give my students criterion-based, on-the-spot feedback to help them adjust their learning to achieve learning goals.

9. Student discourse is at the heart of my lesson. The voice of my students is evident throughout my lesson. They debrief and share insights about what they are learning—and why they are learning it.

10. All my lessons have some form of meaningful closure. I ensure that my students synthesize what they have learned—and give me feedback about their questions and areas of need.