

## **Standard I** **Element C**

### **LEVEL 1 PRACTICES**

#### **THE TEACHER:**

#### **1      *Scaffolds questions, concepts, and skills based on a sequence of learning***

##### **Scaffolding questions:**

A sequence of questions is a continuous or connected series of directed inquiry. Questions can be sequenced in a variety of ways. For example, questions may be ordered from easy to difficult with attention to levels of thinking in Bloom’s Taxonomy. Questions can also be sequenced in order to scaffold understanding about the content. For example, in an inquiry-based lesson the teacher might begin with a higher order/essential question. (*Eagle County Schools Professional Practices Rubric, 2012, p. 35*)

Consistently, the literature on effective questioning has insisted that questioning sequences are far more effective in promoting student learning than any one type of question (Dantonio & Beisenherz, 2001, p. 37).

##### **Examples of scaffolded questions:**

###### **Levels of Bloom’s Taxonomy Scaffold Questions for Financial Literacy**

- What is a debit? What is a credit? (Remembering)
- How do you use debits and credits in journal entries? (Applying)
- How can you assess the importance of balancing a general ledger? (Evaluating)

###### **Content-Focused, Inquiry-Based Scaffolded Questions:**

- What is the impact of my fossil fuel consumption? (Evaluating)
  - What is a fossil fuel? (Remembering)
  - How much fossil fuel does it take to heat or cool my house? (Applying)
  - How can you calculate fossil fuel consumption? (Understanding)
- (*Eagle County Schools Professional Practices Rubric, 2012, p. 35*)

*See also Standard III, Element D.*

##### **Scaffolding concepts and skills:**

... the most effective teachers in these studies taught new material in “small steps.” That is, they only presented small parts of new material at a single time. The importance of teaching in small steps fits well with the findings from cognitive psychology on the limitations of our working memory. Our working memory, the place where we process information, is small. It can only handle a few bits of information at once — too much information swamps our working memory. (Marzano, 2007)

Because the brain has a threshold for how much information it can process at one time, learning is more efficient if information is received in small chunks. Planning strategic stopping points and providing specific learning strategies in a lesson allows students the time and tools to effectively learn the content. As students build their knowledge base, larger chunks of content can be presented. (Marzano, 2007)

Importantly, in the most effective lessons is the conscientious effort, throughout the lesson, to ensure that all students are learning each segment of the lesson before moving on to the next (Schmoker, 2011).

[Click here to go back to the table of contents and view the resource guide in its entirety.](#)



**COLORADO**  
Department of Education

Teaching content that is broken down into manageable parts allows students to build success with each part in order to develop mastery of the concept or skill. By teaching each part and assessing along the way, the teacher is better equipped to identify misconceptions and adjust instruction during the learning process.

#### Sequence of learning:

When concepts are presented in a sequence, they are ordered in a logical way so students can build on their prior knowledge and experiences. Sequencing within a lesson can relate to teaching objectives or to releasing responsibility to students. Concepts should be taught or reviewed in an appropriate sequence for the grade level and ability of the students. Teachers should make teaching decisions based on the needs of their students, the complexity of the objective, and the content.

As support in presenting concepts in a sequence, the teacher should reference the district's curriculum and ask the following questions:

- What do my students already know about this concept or skill?
- What are the prerequisite skills students need to master in order to meet the learning objective?
- How should the skills or steps for this concept be sequenced?
- How will I provide for a sequence that includes procedural learning and conceptual learning?
- How will I support students in building on their thinking and advancing their understanding?

#### *Refer to this internal resource for additional information:*

- [What Does it Mean to Scaffold Questions and Tasks](#)  
Document provides research related to the scaffolding of questions along with examples of scaffolded questions.

#### *Refer to this external resource for additional information:*

- Video: Spiral Questions to Provoke Thinking  
<http://www.ascd.org/ascd-express/vol4/418-video.aspx>  
Video is an example of a middle school teacher scaffolding questions in order to deepen students' understanding of natural disasters.

## **2 *Uses instructional materials that are accurate and appropriate for the lesson being taught.***

Aligning instructional materials with individual student needs, interest surveys, and teacher observations can dramatically increase the levels of student engagement. The purposeful incorporation of materials such as visuals, games, technology, music, humor, and role play can lead to an increased level of student learning.

Deciding on materials can be overwhelming, due to the variety of visual, digital, and audio resources available. The most appropriate materials are those that support student success with the learning objective, align with students' age and cognitive ability, support students' learning needs, and promote student independence and transference of learning.

Materials should be adequate to meet the learning objective. (APS, June 2018)

Teacher knows what elements of the standard need to be taught before other elements can be taught or understood. (APS, June 2018)

## **3 *Encourages and provides opportunities for students to make connections to prior learning.***

[Click here to go back to the table of contents and view the resource guide in its entirety.](#)



**COLORADO**  
Department of Education

In the book, *Visible Learning for Teachers: Maximizing Impact on Learning*, John Hattie identifies three big ideas from Bransford's research in *How People Learn*. One of the big ideas he identifies is linking previous knowledge to new learning.

Although we start with existing knowledge, new learning is not simply tacked on, 'brick by brick,' to the old knowledge—which is why the relationships between old and new understandings are so important. We come to know ideas, and then we can be asked to relate, and extend them. This then leads to conceptual understanding, which can then in turn become a new idea—and so the cycle continues. ...Teachers therefore need to be aware of each student's surface and deep knowing, and the ways in which students have current conceptions, and constantly check to see if the new ideas are being assimilated and accommodated by each learner. (Hattie, 2012, p. 115)

#### Examples for how to link lessons to students' prior learning:

- Questioning: Questions can be a powerful review activity when they are used to assess student learning from previous lessons. Questions may be used to review vocabulary or previously taught content. Example follows:
  - Teacher: "Yesterday we made inferences about a character's traits. How did we do that? How did we connect text evidence to our schema? What is our schema? Today, we are going to use the same process and infer about what a character may be thinking or feeling."
- Summarizing: A brief summary of previous learning experiences can help students know what to expect and how the lesson activities are connected to previous learning and unit goals. A summary may consist of connecting a series of lessons to unit goals or academic standards for the purpose of viewing how concepts or skills have been scaffolded for student mastery. Examples follow:
  - Teacher: "We have been learning about the events that led to the Revolutionary War. We examined the impact of taxes imposed on the colonists by the King and Parliament. We looked at the impact of the Boston Tea Party on the relationship between England and the colonists. Today, we are going to learn about the Boston Massacre and its impact on this relationship."

It is important for the teacher to make connections to students' prior learning so they can build on what they already know about a topic or skill. Once the teacher has made these connections, the next step is to encourage students to make these for themselves and for their peers.

#### Examples for how students can make connections to prior student learning:

- Students may summarize previous learning by:
  - Using their notes to summarize learning over a series of lessons.
  - Reviewing vocabulary and explaining how it has connected to concepts learned.
  - Reviewing key individuals and how they impacted the concepts being taught.
  - Talking with peers to review key concepts previously learned.
- KWL Chart: A KWL chart can be used by the teacher to assess students' thinking by asking what they Know, what they Want to Know and what they Learned. By reflecting on what they already know about a topic, students can use prior learning to make connections to new learning and formulate questions that guide their learning. Example:
  - Teacher: "We began our unit on Claude Monet and Impressionism by completing the K and W portions of our chart. Let's review some of things you said you wanted to know about this type of art. Based on the lesson yesterday, what things have you learned? What do you still want to know? As we continue our study of Monet and Impressionism, record questions you have and we will add them to our KWL chart. Your questions can help guide our unit of study."

Daily review of previously learned concepts or skills can support student learning in the following ways:

[Click here to go back to the table of contents and view the resource guide in its entirety.](#)



**COLORADO**  
Department of Education

- Increase student engagement by making learning relevant and meaningful to students’ lives and past learning experiences.
- Support retention of knowledge by reviewing previously learned concepts or skills and connecting them to new learning.
- Support students in making their own connections to previous learning and other disciplines.  
*See also Standard I, Element B.*
- Provide assessment information on students’ retention of previously taught content or skills.  
*See also Standard III, Element B.*

*Refer to this internal resource for additional information:*

- [Examples of Lesson Plans](#)  
Document provides examples of kindergarten, 6<sup>th</sup> grade, and high school lesson plans that align with professional practices referenced under Basic (now referred to as Level 1 Practices).

*Refer to this external resource for additional information:*

- Article: “Are you Tapping into Prior Knowledge Often Enough in Your Classroom?” by Rebecca Alber  
<http://www.edutopia.org/blog/prior-knowledge-tapping-into-often-classroom-rebecca-alber>  
Article explains the importance of students using prior knowledge and experience to guide their learning and provides ideas for how teachers may do this.

*Planning/Coaching Questions*

- How did you scaffold questions, concepts, and skills to support student learning of the content?
- How will you select accurate and appropriate instructional strategies and materials for each lesson?
- How will you plan for and implement review of previously learned concepts or skills in my lessons?
- How will you ensure the instruction and student activities align to the learning objective(s) and criteria for student mastery?
- How will you provide multiple models and delivery methods to explain concepts accurately?
- What are the likely student misconceptions that will arise during this lesson? How can I address those misconceptions during instruction?
- How will I engage ensure tasks are challenging and provide opportunities for students to ask questions and construct new meaning?
- How will I utilize questioning techniques to engage students in disciplinary inquiry?

[Click here to go back to the table of contents and view the resource guide in its entirety.](#)



**COLORADO**  
Department of Education