

## Ensuring Teacher Quality Leader's Resource Guide—Programmatic Nature of the TEKS Presentation

### **Purpose of Programmatic Nature of the TEKS Presentation**

#### **Materials:**

transparencies  
vis-à-vis markers  
overhead projector  
copies: *Vertical Articulation* handout  
transparencies, *Vertical Articulation*  
handout

This section is intended to inform participants of the nature of the TEKS—the interdependent and programmatic relationship between the conceptual and behavioral learning defined in each grade or course.

*Slide 1*

Title slide; requires no discussion.

*Slide 2*

This is a significant “tell” piece—presenters must stress the connectedness of the TEKS, and introduce the overarching concept of this presentation. Participants will spend substantial time looking at an example of conceptual development delineated in the TEKS. The point here is for school leaders (including campus administrators, lead teachers, mentor teachers, and central office administrators) to understand the building-block structure of the TEKS and the idea that no grade or course can stand alone. New learning is built on the previous years’ learning; therefore, teachers cannot choose to set aside pieces of the TEKS.

*Slides 3–8*

An example for this particular learning—tracking algebraic thinking across grades 6–8 and into the Algebra I and Algebra II TEKS. In the TEKS numbering system K–8, the initial number indicates the grade level; other than that, numbers do not track ideas/concepts—there is no consistency among grade levels. These slides show one way to track a concept from algebraic reasoning from grade 6 through Algebra II.

*Slides 9–11*

Tracking a “big idea” from grade 8 through Algebra II. The concept here is Algebraic Thinking—the process of thinking about the relationships between things that vary; the resulting patterns of those relationships; and ways to symbolically describe those relationships. This presentation piece is not intended to teach algebra or algebraic thinking; rather, it is designed to allow participants to discover the conceptual continuity of the TEKS and the implications for administrators and teachers in their work.

Often high school teachers do not have opportunities to study the development of algebraic thinking throughout the K–8 TEKS. We have found that tracking algebraic thinking before Algebra I and after Algebra II is a very valuable task for algebra teachers.

1. Distribute copies of the blank *Vertical Articulation* handout to participants.
2. Using the overhead projector and the *Vertical Articulation* transparency, fill in the spaces for Subject (Mathematics); Course (Algebra I); Strand (Foundations for Functions); and Course (Algebra) in the middle box of the chart.
3. Refer participants to slides 6–8 to complete the chart, looking at Grade 8 TEKS, Algebra I TEKS, and Algebra II TEKS. Participants can work in pairs or as table groups; discussion is essential to ensure consistency of

- understanding among participants.
4. Remind participants to paraphrase as they put Knowledge and Skills (KS) and Student Expectations (SE) from Grade 8 or Performance Descriptions from Algebra I and Algebra II in the proper columns. Paraphrasing is important here, as it helps participants develop a clearer understanding of the TEKS. (Misunderstandings will also surface in this activity, allowing for collegial conversations about the meaning and intent of the language in the TEKS.)
  5. Encourage participants to challenge the boxes on the chart labeled "Change." Participants should do their best to articulate the differences in Knowledge and Skills statements and Student Expectations/Performance Descriptions from grade to grade, as well as the implications for instruction based on those changes. Remind participants that, although this is difficult work, it guides significant teacher learning, which in turn drives student success.

Present Slide 10 after participants have had ample time to complete their charts. Invite the whole group to respond to the questions on Slide 11.

*Slide 12*

Assign each table group one of the roles bulleted on this slide (classroom teachers, campus communities, the K–12 program, instructional leaders). Allow the groups time to discuss the implications from their particular perspectives (approximately 10 minutes). Ask one participant from each group to report out to the entire group the significant points of their table conversation.