## Transcript – Explore the Gaps

We will now move to a "leaf view" for the next portion of this training.

Let's consider new starting points. The mathematics TEKS for kindergarten through grade 8 were implemented prior to the high school mathematics TEKS, and as such, there are potential gaps for students as they progress through their high school mathematics coursework.

## Transcript – New Starting Points and Potential Gaps

Let's start with exploring learning for students who enter Algebra I in the 2015–2016 school year. These students will have had instruction focused on the revised TEKS (2012) during grade 8 and will have been assessed for mastery of this content. The eighth grade mathematics curriculum for this group of students is aligned with the new content for Algebra I.

Consider the implications for Algebra I students who learned the revised TEKS for grade 8. For example, students will have had exposure to slope, slope triangles, and writing the equation of a line in the form of "*y* equals *m x* plus *b*." This will provide an opportunity to start the discussion of linear functions in Algebra I from a different place than in previous years, in which students had not learned this foundation content.

Take a moment to look at the material that is new for the course that might be sequenced prior to the course you teach in the *Highlighted Curriculum* and *A Vertical Look at Key Concepts and Procedures* documents. What other potential areas will have a new starting point in your course? Record your thoughts in your journal.

Now, let's consider students who are enrolled in Algebra I or Geometry, in either grade 8 or in high school, during the 2014–2015 school year. This cohort of students will not be receiving high school instruction based on the revised TEKS (2012). This group of students would not have received instruction in the concepts and ideas that are new to Algebra I or Geometry during the 2014–2015 school year. For example, the effects of transformations on the functions "*f* of *x* is equal to *x*" and "*f* of *x* is equal to *x* squared" using function notation is new to the Algebra I curriculum. As these students enter Algebra II following the 2014–2015 school year, a potential gap exists, as the 2015–2016 revised curriculum for Algebra II assumes that students have mastered transformations with quadratic functions in Algebra I using function notation.

Additionally, as students enter Algebra II in the 2015–2016 school year, students build on factoring. The revised Algebra I standards state that students should be able to factor using the distributive property, factor trinomials with real factors in the form "*a* times *x* squared plus *b* times *x* plus *c,*" and determine if a binomial is the difference of two squares. The revised standards provide specificity for what students

are expected to learn in regards to factoring. There is the potential that during the 2015–2016 school year, a gap could exist for students based on interpretation of the current standards.

Take a moment to look at the material that is new to your course from the *Highlighted Curriculum* and *A Vertical Look at Key Concepts and Procedures* documents. What other potential gaps do your see for students entering your course? Record your thoughts in your journal.