

Transcript – Introduction

Now that you have learned what a learning progression is, we will start to explore the ESTAR/MSTAR Learning Progressions.

During this lesson, you learn how the ESTAR/MSTAR Learning Progressions were developed, identify the five elements within the ESTAR/MSTAR Learning Progressions, and explore the content focus included in the ESTAR/MSTAR Learning Progressions. At the end of the lesson, you will have time to explore the ESTAR/MSTAR Learning Progression outline.

Transcript – Research and Elements

Before we begin talking about the ESTAR/MSTAR Learning Progressions, let's first discuss the people who created the ESTAR/MSTAR Learning Progressions and the research they used to guide their decisions. First, researchers looked at evidence on how students learn sourcing the Texas Response to Curriculum Focal Points created from the Texas Essential Knowledge and Skills to create a general framework for the ESTAR/MSTAR Learning Progressions. They also looked at the NCTM Standards and research from leading experts. Next, they created a title for two key content areas for algebra-readiness: Understanding Positive Rational Numbers and Variables, Expressions, and Equations. Then, a meeting was put together with a team of researchers and practitioners to organize the standards according to “what comes next” in students’ understanding. In addition, descriptions were written and added to align to how students generally learn.

A meeting was organized with a team of researchers, mathematicians, TEA staff, math practitioners, and doctoral students who were formerly secondary mathematics teachers. These individuals met to review and synthesize the TEKS and the research literature about mathematics learning for algebra content and further develop the two identified ESTAR/MSTAR Learning Progressions. During that meeting, the team deliberated and identified key ideas within each learning progression that were then broken out into levels as well as sub-levels. A draft was created, and it was reviewed extensively by some of the team members to organize the thoughts into a more coherent document.

Take a moment to look again at the elements that we use for the ESTAR/MSTAR Learning Progressions. Keep these in mind as we walk through the progressions. You will receive an outline with all of the ESTAR/MSTAR Learning Progression content at the end of this lesson.