## **Transcript - Introduction**

**Presenter:** Hello. My name is Leanne Ketterlin Geller, and I'm from Southern Methodist University. In this lesson we will talk about the ESTAR/MSTAR Universal Screener Comparison Summary Reports. These reports will allow the user to make comparisons over time for individuals and groups of students, as well as classes and grades, and to make comparisons between groups of students.

The ESTAR/MSTAR Universal Screener is designed to be administered three times per year - in the fall, winter, and in early spring. We can make two different decisions from those results. First, we can determine if students are on track for meeting our expectations in algebra or if they might be at risk for not meeting our expectations in algebra. For students who are at risk for not meeting our expectations in algebra, another decision that we might make from these results is the intensity of support that those students might need in order to be successful.

The "Class Summary Report", which we learned about in an earlier lesson, can be used to assist in making those two decisions at each administration in the fall, the winter, and the spring. But once we have at least two data points, either the fall and the winter; winter and spring; or fall, winter, and spring; we can use the comparison reports to look at the change in students' performance over time.

The comparison report also helps us look at individual student performance or the performance of certain groups of students. For example, the groups of students could be small groups of students receiving a specific intervention, classes of students, or an entire grade level.

## **Transcript - Box and Whisker Plots**

**Presenter:** The assessment comparison report presents information in a box and whisker plot. Box and whisker plots are very helpful for making comparisons because they display the distribution of data over time for a group of students. We can also plot individual performance using line graphs. So, we are going to look at a box and whisker plot and describe how we can interpret the scores on a box and whisker plot.

This is a box and whisker plot. First, let's look at the x- and y- axes. For this box and whisker plot, the x-axis is labeled "ESTAR/MSTAR Assessment." In this case, we just have one assessment displayed. If we had administered the ESTAR/MSTAR Universal Screener two times, we would have two box and whisker plots displayed with different dates. The x-axis may change depending on what we are comparing. The y-axis represents the range of scale scores on the ESTAR/MSTAR Universal Screener. For the ESTAR/MSTAR Universal Screener reports, the y-axis will always show the range of scale scores.

Let's look at the center box. The line in the middle of the center box is the median. Fifty percent of the values fall at or above this line. The lower part of the box marks the lower quartile, meaning that 25% of the students' scores fall at or below that line. The top line of the box plot marks the upper quartile or the 75th percentile. And that's where 75% of the students' scores fall at or below that line. And the two

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whiskers, if you will, show the range of the students' scores. So, the bottom line of the lowest whisker is the minimum score and then the upper whisker shows the maximum score. When we look at the box and whisker plot for our scores, we can see the range of student scores from that administration of the ESTAR/MSTAR Universal Screener. It is important to know that the average is not typically included on the box and whisker plot.

The next set of lessons will walk through how to use the "Comparison Summary Reports" to assist in interpreting scores on the ESTAR/MSTAR Universal Screener and how the information from the reports can be applied to the decision making framework.

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