

## **Module 03 Lesson 06**

### **Interactive Animation: Sample size impact on Standard Deviation Transcript**

Title reads "Impact of Sample Size on Standard Deviation."

There is an arrow on the left side of the animation pointing up with the text "Standard Deviation" alongside of it. There is an arrow intersecting on the bottom pointing to the right with a line underneath it with the number "5" on the extreme left, number "50" in the center of the line, and number "100" on the extreme right. There is a vertical red dotted line that starts at the number 50 and continues to the top of the animation with the word "mean" at the top. The image has a curved line starting from the "5," increasing in height at the "50," and then curving back down at the "100."

Text in the center of the animation reads:

- The red dotted line represents the Population Mean.
- Drag the "Sample Size" slider along the sample size scale. The standard deviation curve will change accordingly depending on an increase or decrease in sample size.
- Note what happens to the shape of the curve when the sample sizes change.

User will drag the 'Sample size' slider along the sample size scale to increase the sample size. The standard deviation curve will change accordingly depending on an increase or decrease in sample size.

In its most extreme LEFT position, the curve is relatively flat.

As user slides the bar to the right, the curve becomes steeper in varying degrees until the slider in the extreme RIGHT position of the slider. At that point the curve is steep.

The curve will change from a wide distribution (i.e. high standard deviation) and get narrower as the sample size increases until the curve is very close to the mean.