Transcript – Student Example VE

Now, you are going to watch a short video of a student working through one of the concepts learning progression VE. Watch for any errors or misconceptions the student makes and what sublevels would need to be retaught or probed in order for students to fully understand the concept. See if the student self corrects. Take notes on page ten of your learning portfolio.

[*Student video*]

Narrator: This student is working on simplifying expressions. Let's watch as he works through this problem.

Teacher: Stew, can you please simplify this expression? [5 - 2(x + 4) is displayed on chalkboard]

Student: Um, I think so. First, you would distribute the two over the parentheses. So that would give me 5 minus 2x plus 8.

Teacher: What would you do next?

Student: I have to add my numbers together. That would give me 13. So the final answer is 13 minus 2x.

Teacher: Good try, but I see a mistake in one of your steps. Let's see if we can find it.

Narrator: Let's discuss the error Stew made and what subcomponents might need to be reviewed.

This student made an error because he did not distribute the negative to both terms in the parentheses. This may be due to misconception in VE.A.4.3ii which says that the student may not distribute a negative over a parentheses correctly. Reviewing sublevel VE.A.4.3 may help in addressing this error.

Transcript – Student Example RN

You will now watch another video of a student working through a progression and take notes on page ten of your learning portfolio. What error is the student making? Which previous sublevels need to be reviewed?

[*Student video*]

Narrator: This student is working on generating simple equivalent fractions using a visual model. Can you identify what misconceptions or errors the student makes?

Teacher: Jenny, which of these fractions is an equivalent representation of this model? [A visual model of five squares (three shaded, two unshaded) and fractions written as 5/3, 6/10, and 3/2 are displayed on chalkboard]

Student: So, um, there are five rectangles. Three are shaded. I think that the three goes on the bottom, so five would be the numerator.

Teacher: So what is your answer?

Student: I think it would be five over three.

Teacher: What did you do to get your answer for this problem?

Student: I counted how many parts there were total, which is five, and how many were shaded, which is three. So, the answer is five over three.

Narrator: Based on this student's response, what error is the student making? Which previous subcomponents need to be reviewed?

This student first made an error of switching the numerator and denominator, which can be linked to RN.A.2.1. Reviewing level 2, equipartitioning, may help in addressing this error.