

Figure 2.3 Example of the 5 Whys Protocol

Data Summary Statement: There is a 30% gap between ELL students and non-ELL students in the functions and algebraic thinking area of mathematics.

Q1: Why is there a 30% gap between ELL and non-ELL students in functions and algebraic thinking?

A1: This area falls within the expressions and equations domain and has much more rigorous expectations than we have had before in middle school.

Q2: Why are ELL students having more difficulty with these rigorous expectations?

A2: They are having difficulty understanding the concepts and applying them in practice.

Q3: Why are ELL students having a difficult time understanding concepts and applying them?

A3: They are not as engaged during small group learning activities that have focused on these areas.

Q4: Why are ELL students not as engaged during small group learning activities?

A4: Non-ELL students take over the manipulatives and don't ask the ELL students to participate.

Q5: Why do non-ELL students dominate the small group work?

A5: They have higher status within the group and don't believe the non-ELL students have anything to contribute.

Q6: Why do ELL students have less status within the small groups?

A6: ELL students have less status in the classroom as well.