Formative Assessment: Item Analysis

Setting & Context: You are a fifth-grade teacher with a class of 26 students. The school is located in an inner city. The class is ethnically diverse. Eight of your students are English Language Learners. Five students have Individual Education Plans (IEPs). Half of the students in your class are eligible for free and reduced lunch.

In language arts, your students have begun a unit on reading informational texts to "explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s)." (Common Core State Standards ELA Literacy RL5.8) You are three days into the unit and you want to see how your students are able to apply the lessons to a reading passage about interdependent relationships in ecosystems in science.

The results of your assessment will help you adjust your grouping for small group instruction and will help you design an alternative instructional strategy for students who haven't been successful at this point. You will also share the information with specialists who are working with some of your students who have been identified as struggling in certain areas. This extra attention is meant to help these students master the content.

Your school has an assessment system that helps you select test items that are linked to the state standards. The item bank is extensive, containing items at each level of rigor based on Norm Webb's Depth of Understanding classification (DOK). Teachers can also develop or import additional items to the item bank. You have the option of using multiple choice (MC), short response (SR), or constructed response (CR) types of questions. You have created an assessment containing 10 MC items.

Students will use electronic tablets to complete this test.

The assessment system can generate a report displaying the correct response for each question and how each student responded on each item. By examining distractor patterns (the incorrect options for each question), you will be able to identify potential misconceptions or gaps in understanding. In addition, you can include students' demographic information in the report. You will use the results to organize small groups for instruction focused on incorporating new instructional strategies to help students fully develop their understanding and skills in this topic area.
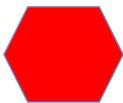
Analyze the Data: Please answer the following questions using the Formative Assessment Data file. Describe briefly in your own words what information in the report you used to answer each question. Describe the data points that informed your response.

1. How do you think your class did overall? How many and what percent of your class correctly answered five or more questions?
2. Are there groups of students that did particularly well or particularly poorly?

3. Which groups are you most concerned about? Why?
4. Which items are of concern to you? Why?
5. Are there other data or information from this assessment you might like to have to help you make your instructional decisions? Are there data beyond this assessment you might like to have to help make your instructional decisions?
6. Given the items that were most difficult and the students that struggled with those items, how might you have adjusted your instructional planning before starting the unit?
7. What instructional decisions could you make based on these results?
8. What additional questions come to your mind based on the data?
9. Overall, what do these data indicate to you?