FIGURE 9.9 Data analysis issues in the scenario questions

Scenario 1

- Find out what the composition of the norm group was: how many students were in it, how they were sampled, and what population they were intended to represent.
- If the school was representative of the norm group, one would expect 40% of students to score below the 40th percentile. Therefore, if only 33% did, the district is doing somewhat better than the norm.
- Never make a major decision on the basis of one assessment. Look for additional evidence. For example, the assistant superintendent says nothing about the efficacy of the current reading program, the text adoption series, the supplemental materials, the reading instruction philosophy (and practice) in schools, whether this has happened previously (and for how many years), and so on. What additional data would be helpful?

Scenario 2

- Data analysis should be a team effort, so help the teacher identify suitable colleagues with whom to investigate the assessment results.
- Identify what types of test scores are in the class report (scale scores, proficiency levels, etc.) and whether there is any report of potential error (e.g., confidence bands around the scale scores).
- Find out whether this year's data are an anomaly or are similar to previous years' data.
- Find out whether this mathematics class's data are similar to other mathematics class data in the school/district.
- Identify an addressable problem, for example, whether the learning goals were clear (and taught), whether the classroom curriculum matched what's on the state test, and so on.
- Help the team identify additional data, including classroom-level data, to more precisely specify the problem and suggest solutions.

Scenario 3

- The professor's points are correct. However, construing the problem as a public relations problem may not satisfy parents and local community members. Based on the data-use process in this chapter, what else could be done? For example, the district could assume ownership of the problem, proactively creating an improvement plan for the next year. Examples of student work could showcase what students know and can do.