In this review, I will discuss the action research on *The Effect of Web-based Homework on Examination Performance and Study Habits of Secondary School AP Physics Students* presented by George S. Lyle.

Lyle followed the steps of the action research process as suggested by the Johnson text (p.29). First, he clearly defined his area of exploration: “Will web-based homework improve student examination performance over paper-based homework? Will students prefer and devote more time to web-based homework than to paper-based homework?” The first question is specific and relevant. Knowing its answer could maximize the effectiveness of homework for the teacher and the students.

On the other hand, the second question does not seem to directly relate to the first. In addition, I am not sure how valuable it is to know that the students “prefer” one over the other. What does that mean? Do they “prefer” Web-based because it is “different”? How would this option change their attitude toward homework in the long-term? Not only that, how would I know that students devoting more time to web-based homework is any indication of student achievement or progress. What if a student simply “wastes” time? The data collection would not be so clear-cut for the latter question.
There are a variety of the types of data collected: the analyses of examination performance of the three sections of Lyle’s AP Physics students, student questionnaire, and field notes. Two sections used Web-based homework and one section used paper-based homework. Collecting the test scores is (presumably) objective and formative although I wish he had described more the background of each section. My question is, are the three sections more or less comparable? This year, I have two sections of physical science. Could I conduct the same research to both groups and later compare the findings? I already know that one class is more advanced than the other. If I want to observe the progress, would I then compare the results before and after?

Student self-assessment invites the students to share their feedback and rate their own experience. This approach is student-centered, and this makes sense if the intent is to motivate more students to consistently do their homework. What they think of homework would give insight to why they would or would not do their work. Breaking down the question into ease of use, preference for WebAssign, ease of learning physics, seeking help from peers and seeking help from teacher makes the data collection process more concrete and more manageable. I appreciate the simplicity of the five answer choices.

Lyle did not explain in details exactly how he included the field notes in the data analysis. Translating the subjective observations into systematic data is a challenge I have. I think I would be tempted to lean more on numbers.
I have a firm idea of my action research questions, but I am still not sure what types of data would be more appropriate or how they should be analyzed. Would I need to collect more data than I think I need because I simply do not know exactly how much information I would need or what I am looking for?