**Scenario 1**

I finished grading the second exam in intro geology. There was a range of grades, as I had expected. And, although several students did poorly, Angela’s low grade bothered me. She was one of the first students to enter the classroom, sat in the second row, and seemed eager to learn. Before each exam, I noticed that she had looked through notecards she had made – so, I know she studied. When she did poorly on the first exam, I thought maybe as a first-year student, she just didn’t know what to expect. (Although I had emphasized to the class that most exam questions would involve interpretations or application of concepts.) Then, she did worse on the next exam - maybe she wasn’t reading the textbook? I asked her to my office to discuss how she prepared. When she opened her book, almost everything was highlighted. She definitely was reading. And, the notecards she showed me had definitions for almost all the geology vocabulary. She told me that reviewing notecards and re-reading the textbook had helped her do well in high school.

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**Scenario 2**

Today’s class discussion was frustrating. I assigned two short research articles for the students to read. They were both significant articles directly related to the topic we are discussing. I thought the students would like reading them, but I could barely get them to say anything. When I asked the students what the main point of the articles were they just looked down at their papers. The student sitting next to me seemed to have highlighted almost every sentence in the first article; so I know he read it, but even he didn’t have anything to contribute to the discussion. Several students admitted that they hadn’t finished reading the articles – they said that looking up all the unfamiliar words took so much time. I agree that there were some new terms, but we still could have discussed the main points of the articles. Half-way through class, I realized we needed a different tack for the class discussion. I turned our attention to a couple of the key figures. I had made comments all over the figures on my copy of the article, but I’m not sure the students even looked at the figures.

*Scenarios inspired by Ambrose et al. (2010) How Learning Works: 7 Research-Based Principles for Smart Teaching, and by shared experiences teaching undergraduates in science courses.*