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Motivating students to read the textbook before class RACHEL E. PEPPER, University of Puget Sound — Many faculty in STEM courses assign textbook reading in advance of lecture, yet evidence shows few students actually read the textbook. Those students that do read often do so only after the material has been presented in class. Preparing for class by reading the textbook beforehand improves student learning and is particularly critical for classes that employ active engagement strategies. Here I present strategies I have used to successfully motivate my students to read the textbook before class in physics classes ranging from introductory algebra-based physics to advanced courses for physics majors. In the introductory course, I used pre-class reading quizzes, a common strategy that has been shown effective in previous studies, but one that is somewhat time-consuming to implement. In my more advanced courses I used reading reflections, which required considerably less time. While it was typical for less than 25% of students to read the textbook before I implemented reading quizzes or reflections, after implementing these strategies 70-90% of students reported reading the textbook before class most of the time. Students also report finding both the readings themselves and the quizzes and reflections valuable for their learning.

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