

Spotlight on: Mastering Implementation

What if exam scores aren't reflective of homework scores?

If correlations between required Mastering™ homework scores and exam performance are not strong, first try to understand why. The initial thought may be that students are cheating on homework. While that can be the case, it is not the only reason that can happen as demonstrated by the examples below. After making a change to their Mastering implementation, these instructors saw an increase in the correlation between Mastering homework and exam performance. When there is a strong correlation, instructors can better track learning through homework performance.

Does Mastering homework align to exams?

At [Lipscomb University](https://bit.ly/2GGzpIT), the A&P instructor piloted Mastering in [A&P I](https://bit.ly/2GGzpIT) using a pre-built module. The correlation between homework and exams was moderate ($r=.41$). When she piloted it for [A&P II](https://bit.ly/2IzkryF), she said, "I considered the information I knew I would test or quiz on and thought about how I could drive understanding with the homework. I still started with the pre-built homework assignments, but I modified them more." The result was a stronger correlation ($r=.61$), with one student stating:

"[Mastering] helped me focus on the ideas that were most important to the chapter."

—Student, Lipscomb University

How often do students engage with Mastering homework?

At the [University of Texas at El Paso](https://bit.ly/2IyJRwg), the Statics instructor noticed that many students waited until the last minute to do weekly Mastering homework, sometimes within an hour of the time due, and often not completing it. Rather than one Mastering homework per week, he started assigning one homework for each class meeting. Correlations increased from $r=.57$ (weekly homework) to $r=.70$ (homework due each meeting). Research tends to support more frequent homework and shows that spaced practice leads to improved memory retention which can help students do better on exams.

How can Mastering be implemented to provide summative and formative opportunities?

At the [University of Ottawa](https://bit.ly/2Hg1v8A), the General Chemistry instructor felt students were doing well on Mastering homework but were not performing comparably on exams. She added a timed, one-attempt, Mastering quiz to simulate the exam in addition to the chapter homework for practice. The instructor felt it would help students understand how prepared they were for a timed, high-stakes exam. After adding the timed quiz, correlations between Mastering and exam scores increased to $r=.77$. One student summed it up by saying:

"The timed Mastering Chemistry quiz was a major wake-up call! I had no idea how long I was taking to solve problems. It really opened my eyes and helped me prepare for exams."

—Student, University of Ottawa

Are students cheating on Mastering homework?

Cheating on homework can impact correlations between Mastering homework and exams. Using recommended best practices and Mastering settings can minimize the opportunity that students have to cheat. To learn more, read the [Spotlight on Implementation: How can cheating on Mastering homework be addressed?](https://bit.ly/2EnV7Jb)