

Product Name MasteringA&P

Course Name Anatomy and Physiology I and II

Credit Hours Four

Key Results Personalized feedback in MasteringA&P helps students to identify where to focus their efforts, which results in better exam preparation and higher course grades.

Text

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Implementation

Anatomy and Physiology (A&P) I is a study of basic biological chemistry, cellular structure and function, histology, and integumentary, skeletal, and nervous systems. A&P II is a study of the anatomy and physiology of the muscular, circulatory, immune, respiratory, digestive, excretory, endocrine and reproductive systems. Both courses are prerequisites for admission to all allied health programs except one, and the grades achieved in these courses are often used as a predictor for student success for admission to those programs.

Because of the importance of these courses, it's critical that students successfully learn the course content. Over the years, I became increasingly frustrated with students who did not read the textbook and then struggled in class. After speaking with colleagues at a conference about ways to motivate students to read, I adopted MasteringA&P. The program enables me to assign prelecture homework and thereby better monitor student reading and comprehension of the material. The required homework consists of end-of-chapter questions and tutorials, and I use the diagnostics to better understand where students are struggling.

I also have added my own essay review questions to the MasteringA&P homework in order to mirror questions on my exams. I develop complex content questions which may cover multiple modules and promote critical thinking skills. I give feedback on the written homework questions before the exam review period to help students identify those concepts they need to study.

Assessments

70 percent Exams (five) and MasteringA&P homework (equal to one exam grade)

30 percent Lab

Results and Data

To determine if the changes implemented in the course were having a positive impact, I analyzed the data for both A&P I and II before and after adopting MasteringA&P. I found that in both courses the drop/fail/withdraw (D/F/W) rate decreased significantly, and the total number of students earning As and Bs increased. See figures 1 and 2.

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In addition, I compared the lecture average grade, which includes the MasteringA&P homework, to the course grade since the lab portion did not change. The results in both A&P I and II showed that students achieved a higher lecture average after using MasteringA&P. See figure 3.

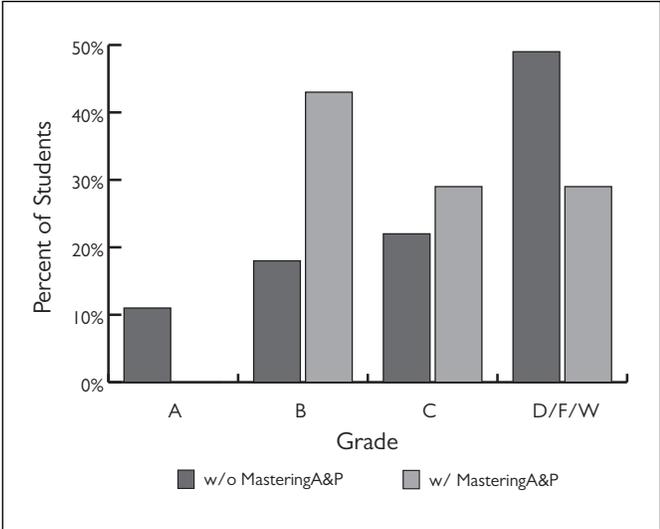


Figure 1. Anatomy & Physiology I Grade Distribution with and without MasteringA&P

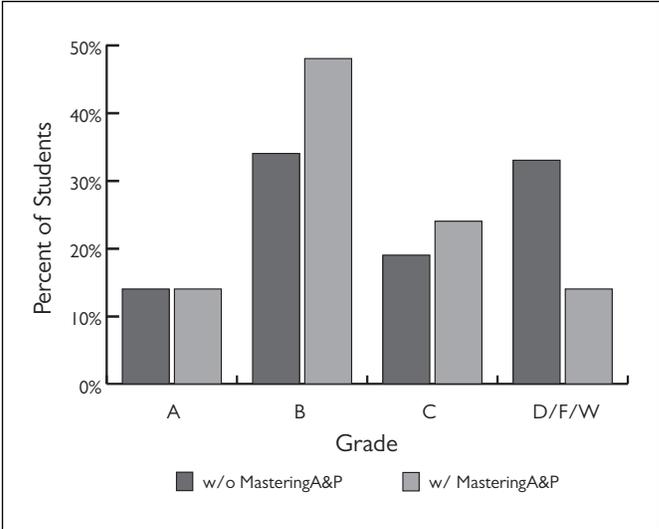


Figure 2. Anatomy & Physiology II Grade Distribution with and without MasteringA&P

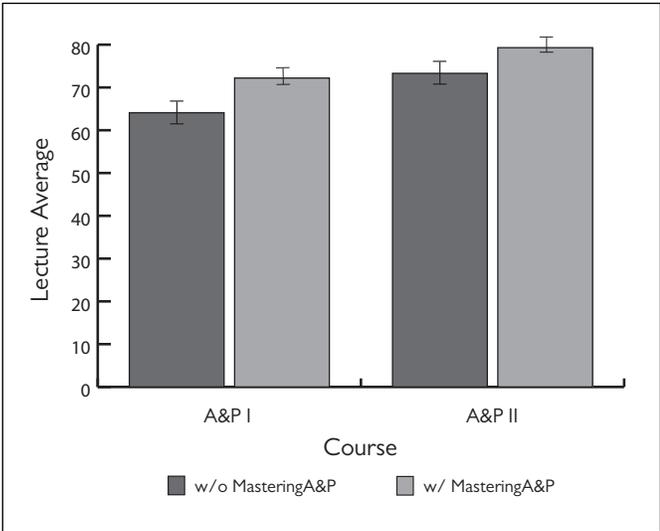


Figure 3. Anatomy and Physiology I and II Lecture Average with and without MasteringA&P

The Student Experience

MasteringA&P gives students more confidence to ask questions because they have a better understanding of what they don't know. Student questions are more focused on the content they need the most help with based on their MasteringA&P results. They know where to focus their efforts when studying, and are therefore better prepared for the exams.

Conclusion

I have been teaching for 38 years and have found that students often will not ask for help when they need it—usually because they don't know what to ask. MasteringA&P gives the feedback students need to more efficiently focus their efforts and achieve higher levels of success.

*Submitted by Bruce Fisher
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