

Product Name **MasteringA&P**

Course Name **Anatomy and Physiology**

Credit Hours **Four**

Key Results Use of MasteringA&P's interactive features enhanced student enjoyment in the course and increased student understanding of course concepts. In addition, there was significant correlation between performance with the program and final course grades.

Text

Fundamentals of Anatomy and Physiology, 8e, Frederic H. Martini and Judi L. Nath

Implementation

Anatomy and Physiology is a traditional face-to-face course for first-year Sport and Exercise Science students. It comprises 36 hours of contact time over a 10-week period.

I introduced MasteringA&P in spring 2011 to encourage interactive online learning. I used the program as a visual, active-learning resource to complement the lectures. Students were encouraged to access the online tutorials, eBook, interactive activities, podcasts, animations, and self-study resources.

I also created three short, online assignments using multiple-choice questions from the MasteringA&P database. Assignments were required and contributed towards their cumulative grade. Students were informed of the dates to complete the online assessments and there was no time limit for completion. The assignments were automatically graded, and scores, completion time, and question difficulty were exported into an Excel document. The individual assignments took an hour on average to complete, although time spent online ranged from three minutes to more than three hours.

From January to June 2011, students had online access to all MasteringA&P resources, and assignments could be repeated for practice, but not regraded.

Results and Data

- Aggregate scores of the three MasteringA&P assignments ranged from 23.3 to 91.1 percent.
- More than 80 percent of students completed the three MasteringA&P assignments with an average aggregate score of $65.1\% \pm 14.2$.

- There was a significant relationship between performance in the MasteringA&P multiple-choice questions and overall module grades achieved.

From the student perspective:

- 95.2 percent enjoyed completing the online assignments and found them "interesting and helpful."
- 92.1 percent said they would recommend MasteringA&P to a fellow student.
- 85.5 percent felt their understanding of the course material increased as a result of using MasteringA&P.
- 75 percent said they would prefer to learn this way in the future.
- 60.3 percent reported that they learned more through the online assignments than lectures alone.
- The most popular features were the Interactive Physiology option and postlecture quizzes.

Conclusion

Use of MasteringA&P enhanced students' understanding of the topic and complemented my face-to-face lectures. Students consistently referred to the enjoyment they experienced from a more interactive, hands-on approach to learning.

From a facilitator's point of view, MasteringA&P was user-friendly, easy to manage, and comprehensible. Having access to a sizeable bank of questions ensured I could tailor the assessments to reflect the lecture content. It also provided an accessible-on-demand study tool for students and an alternative teaching and learning method that effectively accommodated different student learning needs.

*Submitted by Jo Barton
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