Product Used   **MyStatLab**
Course Name   **Elementary Statistics**
Credit Hours   **Three**

UNIVERSITY
AT ALBANY
State University of New York

KEY
TAKE-AWAY

More statistics homework needn't mean more instructor time. By requiring UA students to complete MyStatLab homework and use its Study Plan, they get the hands-on practice they need to master beginning statistics concepts without taxing instructor resources.

Textbook in Use

Introductory Statistics, 3e, Richard D. De Veaux, Paul F. Velleman, David E. Bock

Course Implementation

Course Design
Courses may run either three days per week for 55 minutes each day or two days per week for 80 minutes each day. Smaller classes meet in traditional classrooms; larger classes meet in the university's Lecture Center.

MyStatLab was introduced in spring 2007. At that point, it was used solely for homework. In spring 2008, the school starting using the program to create and complete quizzes.

Assessments
20 percent   Homework
                  Homework is assigned on MyStatLab after two chapters have been covered. Students have a week to complete homework assignments

17.5 percent   Quizzes
                  Quizzes are given on MyStatLab every other Friday for a total of five per semester. Students are allowed up to three attempts and must complete them within a week.

62.5 percent   Exams
                  Exams are taken once a month (chapter unit exams) and at the end of the course (final exam). Exams are taken in class; students must complete exams during class time.

Use of MyStatLab
Students are introduced to MyStatLab on the first day of class. How to use the program for homework assignments, quizzes, and study plans is explained to them. After the first day, questions about the program may be addressed with the instructor after class or during office hours.

MyStatLab homework assignments and quizzes are mandatory. In addition, students are assigned required Study Plan questions and chapter exercises prior to exams.

Exam grades and grades from some homework assignments are imported into MyStatLab.

As of fall 2009, use of MyStatLab contributes 37.5 percent of the final course grade.

Results and Data

Table 1 compares a variety of student achievement metrics before and after implementation of MyStatLab and shows how those figures are impacted by the percentage contribution of MyStatLab use.

Homework scores dramatically increased from an average of 79.2 before the use of MyStatLab to an average of 89.9 with MyStatLab.

Although not noted in table 1, James Lamatina, lecturer for the course, reported that those students who used the

Study Plan received higher examination grades than those who did not.

Of particular interest to Lamatina is how the program promotes students' taking responsibility for their learning. MyStatLab's Gradebook feature enables both Lamatina and his students to see how students' work habits influence their achievement, and features like the Study Plan and Ask My Instructor make obtaining help convenient and easy. To further assist those students who desire it, Lamatina offers

I couldn't handle big lecture classes without MyStatLab. Collecting and grading homework assignments would be too time-consuming and stressful. I'd have to grade students on examinations alone.

—James Lamatina, Lecturer
University at Albany

Semester	Homework Format	# of Students Enrolled	Dropout Rate	Homework Average	Quiz Average	Exam Average	Percentage of As	Percentage of A/B/Cs	Percentage MSL Contribution
Spring 2006	Textbook only	87	5.7%	76.6	–	84.8	38.6	84.7	–
Fall 2006	Textbook only	128	2.2%	80.8	–	86.5	51.2	88.7	–
Spring 2007	MyStatLab	149	2.8%	91.5	–	89.3	54.7	91.1	35.2
Fall 2007	No Records Available								
Spring 2008	MyStatLab	400	7.8%	91.1	87.6	87.2	44.7	84.0	41.8
Fall 2008	MyStatLab	577	4.5%	88.5	77.8	73.6	17.0	84.0	40.0
Spring 2009	MyStatLab	364	6.1%	89.8	86.3	75.6	25.1	80.4	40.0
Fall 2009	MyStatLab	275	3.2%	87.9	78.9	75.7	16.9	77.4	37.5

Table 1. Comparison of MyStatLab Usage and Student Achievement Data, Spring 2006–Fall 2009 Semester Averages across All Class sections (*n*=1,980)

office hours, plus in 2009 added an optional day for review before tests. Given the opportunities available to students, when asked what might contribute to the decreased success reflected in table 1, Lamatina replied that while efforts are designed to reach all at-risk students, he finds that only those willing to take responsibility for themselves step up.

In this way, MyStatLab can help students identify earlier whether they have been appropriately placed. Lamatina suggests that this explains the increased drop rates: students, particularly freshman nonmajors, learn right away whether or not this is the course for them, and they can therefore drop the course before they fail it.

The Student Experience

Lamatina has received the following comments from students using MyStatLab in Elementary Statistics.

- "Even though the professor doesn't assign all the questions, the Study Plan allows us to see other problems that can be worked on. These problems help me on future quizzes and tests."

- "I've used other Web sites to work on assignments for the course. Of all of them, MyStatLab is the best."

- "The Help Me Solve This feature is a very useful application. Its step-by-step process helps me get a detailed understanding of the problem."

- "I like that when I input a wrong answer, the program doesn't just reply that the answer is incorrect. It gives me feedback on how to correctly do the problem."

Conclusions

"I really like this product," says Lamatina. "My teaching is streamlined and more effective, and the students benefit from it."

Future plans include offering tools for success to promote mastery of statistical computations on a TI calculator and further exploring how weighting the use of MyStatLab

impacts student success. Lamatina reports that due to what he's seen thus far, he expects to increase the percentage contribution in future semesters.

Submitted by James Lamatina, Lecturer
University at Albany