

Product Used **MyStatLab**
 Course Name **Introduction to Statistics**
 Credit Hours **Three**



KEY TAKE-AWAY

MyStatLab's easy-to-use interface meant FRCC students were willing to complete more and more difficult assignments and enabled the addition of quizzes to the curriculum. Even with the increased workload and rigor, students outperformed those without the product.

Textbook in Use

Fundamentals of Statistics, 2e, Michael Sullivan

Course Implementation

Course Design

In fall 2007, Sandra Williams adopted MyMathLab in her College Algebra course. Its ease of use and its efficacy convinced her to try MyStatLab in her spring 2008 Introduction to Statistics course. She was so convinced, she traded the school's standard statistics textbook for a Pearson title—solely so she could use MyStatLab.

Introduction to Statistics is an online course. At the beginning of the semester, students receive a course syllabus. They are required to read the course material and complete assignments in MyStatLab according to the deadlines in the syllabus. The instructor answers questions via e-mail, discussion postings, or phone; or during virtual office hours; or in person by appointment.

Assessments

- 60 percent Exams
Paper and pencil, on-site, and proctored
- 20 percent Homework
Completed in MyStatLab, 11 assignments, one per chapter
- 20 percent Quizzes
Completed in MyStatLab, three per semester, three-hour time limit covering several chapters each

Use of MyStatLab

Homework and quizzes are required and are completed in MyStatLab. Use of the Study Plan is optional. Grades are imported into MyStatLab.

Use of MyStatLab contributes 40 percent to a student's final course grade.

Results and Data

Data in Table 1 show that students using MyStatLab achieved higher averages across every comparison metric: a 12 percent increase in homework scores, a 4 percent increase in overall

exam scores, a 6 percent increase in average course grades, and a 5 percent increase in the course pass rates.

	Average Homework Score	Average Quiz Score	Average Exam Score	Average Course Grade	Average Pass Rate
Prior to MyStatLab (Spring 2006 and Spring, Fall 2007)	84.9	—*	78.6	79.7	77.7
With MyStatLab (Spring, Fall, Summer 2008 and Spring, Summer 2010)	95.2	81	81.9	84.5	81.3

Table 1. Comparison of Student Achievement before and after Implementation of MyStatLab (n=233)

*Quizzes were not offered in spring and fall 2007. "I was so frustrated with the old software, I was using it as little as possible," says Williams.

With MyStatLab, I know my students are getting the practice they need to succeed in the course.

—Sandra Williams, Faculty
Front Range Community College

“These achievement increases are even more significant,” says Williams, “when you consider that the students using MyStatLab were given harder questions—and still they performed better than students in the previous semesters. I believe that the students who used MyStatLab actually learned more than the previous semester’s students did.

“With MyStatLab,” says Williams, “students can’t fake their homework like they could with paper-and-pencil homework. They must get the question completely correct to receive credit. For some students, that means working the problem several times. Thanks to the user-friendliness of the software, students are willing to put in the extra time.”

Williams reports that adding quizzes to the curriculum was another benefit of switching to MyStatLab and a contributing

factor to the increased student gains. She had considered adding quizzes in the previous semester, but the courseware she was using at the time made it less than convenient, and within the context of the program, it was not a value add. “MyStatLab made it easy to add quizzes to the curriculum,” Williams says. “There are lots of great questions to choose from, and the questions are interactive, not just multiple-choice.”

Williams attributes the higher pass rate to her students’ understanding the material better. “They experience first-hand that they can be successful,” she says. “All of these grades are for online classes, which typically have low pass rates. This says a lot for what MyStatLab does to improve retention.”

The Student Experience

Williams’s Introduction to Statistics students made the following unsolicited comments about MyStatLab.

- I want to compliment you on your choice of text and accompanying Web site. Both were very well organized and user-friendly.
- This software was very easy to navigate and made doing homework much easier than previous software I’ve used. If I had a question on how to solve a problem, the software worked through a sample problem with me, helping me understand where my mistakes were being made. I love the new book and software.
- By the way, MyStatLab is a pretty cool setup. I write Web site code for a living and find this program’s features and quality pretty impressive. The user interface is easy to navigate regardless of user skill level, and no weird errors caused me to stop or lose work. Plus it works well across multiple browsers, not just Internet Explorer.

Conclusions

Both the objective data from Table 1 and her own subjective observations of the students have convinced Williams to continue using MyStatLab. “It’s the best statistics product out there,” she says. “My students really like MyStatLab. That means they’re more likely to use it.”

Williams’s students were particularly responsive to the program’s Help Me Solve This feature. “In paper-and-pencil homework, students can view examples only in the text,” says Williams. “Most students don’t find that useful because frequently there’s no connection between the example and the problem they’re trying to solve. Help Me Solve This inserts different numbers into the same problem

the student is stuck on, and students learn in context how to arrive at the solution.”

Williams plans to explore how she can leverage future use of MyStatLab to further improve retention. One potential idea is to offer incentives for extra work in the program.

Meanwhile, Williams plans to continue tracking data in an effort to establish a more substantial, longitudinal, and defensible picture of MyStatLab’s effect on student success.

Submitted by Sandra Williams, Faculty
Front Range Community College