

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



## KEY TAKE-AWAY

By fully implementing MyStatLab's many interactive multimedia resources, RACC is able to effectively serve the breadth of student learning styles and thereby significantly positively affect both pass rates and retention rates.

### Textbook in Use

*Essentials of Statistics*, 3e, Mario F. Triola

### Course Implementation

#### Course Design

Introduction to Statistics meets for three hours each week. Students are assigned required homework in MyStatLab, as well as assignments checked using SPSS. Homework may be completed at home, or in one of Reading Area Community College's (RACC's) math or open computer labs, or at the library.

As of spring 2009, students are also offered access to supplemental, in-person instruction and full access to StatCrunch.

#### Assessments

Students are assigned required homework for each chapter. Homework is completed in MyStatLab and may be worked on until it is correct up to the due date.

Students take a total of six tests, which are administered via MyStatLab.

#### Use of MyStatLab

Use of MyStatLab has expanded since it was first adopted in spring 2007. Initially used solely for practice and its supplemental resources, the program is now used for the breadth of course activities: study plans, all homework, custom exercises, and tests. Course administrative tasks are also handled within the program: students find the course syllabus in MyStatLab, and handouts and technology assignments are posted under external links.

In addition, MyStatLab's coordinator course feature is used for standardizing assignments, rubrics, and project topics throughout the department.

Use of MyStatLab contributes to 75 to 80 percent of a student's final grade.

### Results and Data

After fully implementing MyStatLab in spring 2007, RACC saw significant improvement across a range of student success rubrics: the average grade point increased from 2.76 to 3.06; the percentage of students who enrolled in the class earning an A, B, or C increased from 69.8 to 85.8; the percentage of students who completed the class earning an A, B, or C increased from 81 to 91.8; and the course retention rate increased from 86.4 to 93.6. Table 1 illustrates the improvement by semester.

Diane Hollister, chair, science and mathematics division, describes the impact MyStatLab has had on her students as "very positive."

"MyStatLab has helped improve the course's success and completion rates," she says. "Despite the variables found in any community college setting, we are confident of the correlation between the program and the improvements. MyStatLab's item analysis feature helps us pinpoint deficiencies and fine-tune what we need to do to fix them."

Hollister reports that prior to the MyStatLab adoption, her students did not consistently complete homework. MyStatLab's immediate feedback and Gradebook help them make the connection between doing homework—thereby practicing more—and achieving a higher grade.

*MyStatLab is easy to use and very convenient. I can sit at home with my three-year-old in my lap and do my homework—repeating similar problems over and over until I get it. I can do a test at 1 a.m. if I need to. And because everything is in one place, I can't lose my homework. That is really helpful.*

—Student  
Reading Area Community College

	Percentage of Students Who Enrolled in the Course and Who Earned an A, B, or C	Percentage of Students Who Completed the Course and Who Earned an A, B, or C	Retention Rate
Average After MyStatLab Adoption	78	85	92
Average Before MyStatLab Adoption	70	81	86
Percent Change	+11%	+5%	+7%

Table 1. Comparison of Success and Retention Rates in Introduction to Statistics before and after MyStatLab Adoption, Winter 2006–Spring 2011

## The Student Experience

The best practices enabled by MyStatLab improve the learning experience for Hollister's students.

- Students who receive immediate feedback are more motivated, work independently for longer periods of time, and are more likely to work until they've mastered the material.
- When students need help, they can reach out to Hollister by using the Ask My Instructor feature. Hollister uses MyStatLab to email her students and post messages to them on the discussion board.
- MyStatLab's multimedia resources and anywhere/anytime availability provide students with all the benefits of a personal tutor and none of the cost.
- MyStatLab offers visual, audio, and kinesthetic learners the help they need in the learning style that suits them best. "Students learn differently," says Hollister. "It's nice to have the variety of resources at our fingertips."

## Conclusions

Hollister is pleased with the results she's seeing with MyStatLab. Any changes she anticipates making in the future are based on item results she tracks using the program itself.

"MyStatLab tracks item results data for us and then is flexible enough for us to make changes based upon it as often as we desire," says Hollister. "For example, in fall 2009 we found that students continue to procrastinate completing the final project. So for spring 2010 we are keeping them on track by requiring weekly assignments toward the completion of the

project. Plus, by posting all handouts to MyStatLab, we alleviate excuses for not knowing or losing the information."

Submitted by Diane Hollister, Chair, Science and Mathematics Division  
Reading Area Community College