



Digital Course Solution Improves Student Success and Increases Instructor Efficiency

Prior to 2014, both students and instructors of the Introduction to Computers course at Metropolitan State University of Denver were dissatisfied with the program. For one thing, the assigned materials were spread across a number of books and software platforms, leaving students confused about where to find their homework assignments, and instructors unhappy that they had to spend so much time grading assignments by hand.

The result was that a high percentage of students were failing to pass the class -- particularly low-income students and students who were the first in their family to attend college.

That all changed when Professor Vicky Seehusen adopted SIMnet as the primary learning tool for the course. Since SIMnet is an all-in-one learning solution, students could find all of their homework in one place. Instructors were also pleased, because SIMnet could automatically grade most of the assignments, freeing them up to focus on the students who needed more attention.

Digital Product in Use: SIMnet
Course Name: Introduction to Computers
Course Type: Traditional
Credit Hours: Three
Textbook in Use: None
Instructor Name: Vicky Seehusen
Enrollment: 1,000/year
Case Study Term: Fall 2013 - Fall 2014

Institution Profile

Metropolitan State University of Denver has nearly 23,000 students enrolled across three campuses in Colorado. The university offers 220 degree options, including bachelor's degrees, master's degrees, licenses, concentrations, and certifications.

Implementation

Course Description:

The Introduction to Computers course is designed to give students a broad understanding of computer theory and a deep working knowledge of productivity applications. Students learn how to use a personal computer, focusing on applications for word processing, spreadsheets, file management, graphics, electronic communications, thesaurus, and spell-checking. In addition, students learn about the historical, societal, ethical, and technological aspects of computers.

Course Grade:

- 62% of the grade is based on Microsoft Office applications
- 38% of the grade is based on computer issues and concepts

Challenges for the Course:

The main problem identified by the school was a high rate of students failing the Introduction to Computers course. Students were considered to have failed the course if they received a D or F in the class, or if they withdrew or got an incomplete. In the Fall of 2013, prior to the implementation of SIMnet, the course's failure rate was 33.7 percent. The university thought that was an unacceptably high rate of students failing the class, so it put together a committee to find a way to help more students pass the course.

Implementation of SIMnet:

The solution hinged on SIMnet. Instead of using a number of books and digital platforms to teach the course as they had been doing in the past, the committee agreed to implement the SIMnet educational platform as the primary teaching tool. Starting in the Summer of 2014, Metropolitan State University of Denver replaced its course materials for Introduction to Computers with SIMnet. To get all course sections in line, Seehusen created a master SIMnet course that all of the instructors would use as the blueprint of their curriculum.

However, instructors were free to add or adjust the core materials as they saw fit. For instance, one instructor highly prized computer concepts and made that a slightly larger part of the grade. But for the most part, all sections would teach the same material. In every section, all of the students' homework assignments and exams were given through SimNet.

Results Achieved

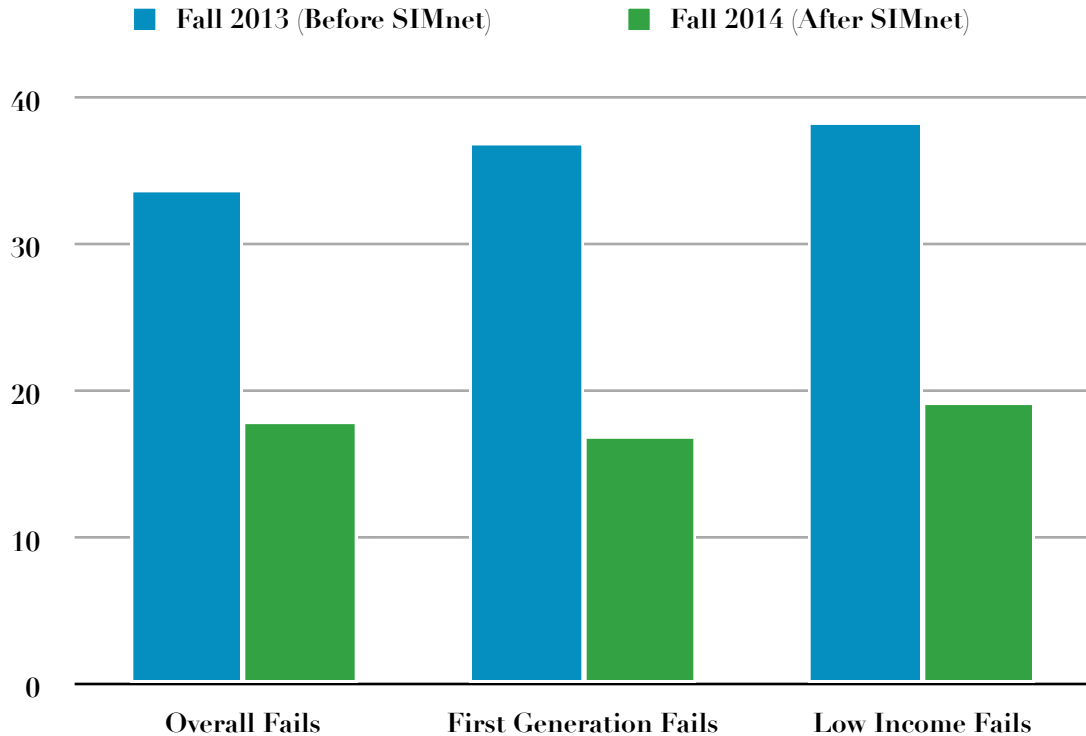
Students have told Seehusen that they find it much more convenient and straightforward to have all of their homework gathered in one place.

The students' results speak for themselves. Overall, between the Fall 2013 semester (pre-SIMnet) and the Fall 2014 semester (with SIMnet) the failure rate dropped from 33.7% to 17.9%.

The change was particularly noticeable in students who were the first in their families to attend college. Once the instructors implemented SIMnet, the failure rate for first generation students dropped an incredible 49.2%. The failure rate for low income students dropped 43.2%. Older students also benefited in particular. Sophomore failure rates dropped 51%, junior failure rates dropped 73.5%, and senior failure rates dropped 66.7%.

It wasn't just students who benefitted from the switch to SIMnet. Thanks to the automatic grading tools built into SIMnet, the instructors now spend much less of their time grading individual homework assignments. That frees them up to spend more time working on their curriculum and paying extra attention to students who need help. Or, as Seehusen puts it, "The Simnet grade book has been pretty darn good."

"SIMnet has proven to be a successful all-in-one digital learning platform for students and instructors alike. Students are passing the class at much higher rates than before, and instructors are spending less time grading."



Conclusion

Vicky Seehusen is happy with SIMnet and plans to continue to use it in the coming years. Based on the statistics Metropolitan State University of Denver has tracked over the past few semesters, SIMnet has proven to be a successful all-in-one digital learning platform for students and instructors alike. Students are passing the class at much higher rates than before, and instructors are spending less time grading homework by hand. For Professor Seehusen and other instructors at Metropolitan State University of Denver, SimNet has proven to be a powerful tool for designing a course of study, teaching a large number of students, and increasing student success.