

SALT LAKE COMMUNITY COLLEGE: MATH STUDENTS SCORE HIGHER USING OER

Goal

Improve students' success in math, using high quality materials available at a lower cost to students.

Solution

Using MyOpenMath, an online math solution created with open educational resources (OER), SLCC provides an environment for math education that is more affordable, engaging and effective than the comparable commercial product. A \$5 course materials fee covers Lumen Learning support costs.

Results

SLCC saw huge improvements in student success in developmental and college math sections using OER as compared to those using commercial materials:

- **More passing grades:** Students passing with a C or better increased from 59% in non-OER sections to 63% in sections using OER.
- **67% more "A" students:** 25% of students received A's in sections using OER, compared to just 15% in sections using commercial materials.
- **Tens of thousands in cost savings:** The 257 students enrolled in OER-based courses saved over \$48,000 textbook and online access fees.
- **35% drop in failing students:** Failing grades fell from 20% in sections using commercial materials to 13% in sections using OER.
- **27% fewer withdrawals:** Withdrawals dropped from 6.4% in sections using commercial materials to 4.7% in courses that used open content.
- **100% access on day 1:** All students have complete digital access to all the course materials starting on the first day of class.



PROFILE

- Publicly-funded community college
- Serves ten campuses in the Salt Lake Valley
- Approximately 30,000 students
- Utah's most diverse higher education institution
- www.slcc.edu

LEARN MORE

- Read more about SLCC's story: <http://lumenlearning.com/success-story-slcc/>
- Video: "They're getting the math!" http://youtu.be/YFb59_Gk040
- Check out MyOpenMath: <https://www.myopenmath.com/>

Approach

Boosting student performance in math is an ongoing priority at Salt Lake Community College, which serves more than 30,000 students annually at 10 campuses across Utah's Salt Lake Valley. After adopting a commercial publisher's textbooks and online homework system for math courses that averaged \$200 or more per student, faculty members saw room for improvement.

During the 2013-2014 academic year, SLCC chose to pilot open materials with four courses: Developmental Math; Pre-algebra; Intermediate algebra; and Calculus 1. OER-based MyOpenMath offered open textbooks, video tutorials and algorithmically-generated problem sets for each course. Lumen Learning provided hosting, training, faculty and technical support to ease the transition to open content.

SLCC implemented a \$5 course materials fee for OER-based course sections to recoup Lumen's support costs. For students this offered >95% savings over the cost of commercial textbook and online access fees. Students were thrilled with the open alternative.

Impact

Together, the 257 students in OER sections saved more than \$48,000 during the 2013-2014 academic year. Faculty also saw immediate benefits. Unlike the commercial system, MyOpenMath offered every student free access to all course materials from the first day of class. Students began engaging earlier and more deeply in the learning process. The MyOpenMath user experience compared favorably to the proprietary system.

Student learning data tell a powerful story about the positive impact of OER. In courses using OER, more students passed with a C or better and 35% fewer students failed. Withdrawals fell. The number of students earning A's jumped by 67%. Data suggest that nearly a third of students who would have received B's in courses using commercial materials received A's in courses using open content.

Sustaining Success

With student impact data in hand, SLCC administrators have quantifiable evidence about the positive impact of open educational resources. Responding to students' demands for more sections that require no commercial textbook purchase, they are in the process of adding more sections and courses that use OER. The established course materials fee funds ongoing support for courses using open educational resources.

"We are encouraging faculty to look for open alternatives. Support from Lumen Learning makes the transition smooth for instructors and students. It also guarantees the quality and availability of the open materials that are becoming part of our core curriculum," said Jason Pickavance, Director of Educational Initiatives at SLCC. "With students clearly benefitting in so many ways, we feel an obligation to keep moving forward with open content."

Salt Lake Community College:
Impact of OER on Math Students' Success

