

# DX STORIES

DIGITAL TRANSFORMATION | *Teaching & Learning*

## 1. WHAT WAS THE PROBLEM?

"It's no secret that students often struggle to complete the math requirement for their degree, so for the last few years our department has been searching for a way to increase course retention, and success rates, but in a way that doesn't compromise their rigor."

"...if you or your department are looking for a way to develop and distribute cost effective, quality course materials, check out Open Educational Resources. The effort will be worth it."

## 2. HOW DID THE PROJECT LEADER(S) APPROACH SOLVING THE PROBLEM?

"Pretty early on we concluded that there were two big issues we needed to solve if we were going to help our students.

First, was the adoption of good course materials that focused more on mathematical thinking and reasoning, than rote memorization.

Second, we needed to find a way to deliver these materials at low cost in a way that was easy for the students to access, right at the beginning of the semester, so they wouldn't fall behind.

Of all the solutions we researched, Open Educational Resources was the best. OER gave us the freedom to develop the kind of course materials that our students need and gives them access to it for free."

## 3. WHAT WERE THE RESULTS?

"There are **three types of OER**: 1) Private companies; 2) University-based; and, 3) Non-profit organizations. We found the University of Illinois to be a great resource of collected OER materials. The U of I has links to some of the most trusted sources like OpenStax, MIT OpenCourseWare, and Khan Academy that you might find helpful.

The logo for Lumen Learning, featuring the word "Lumen" in a large, bold, black font with a white outline, and the word "LEARNING" in a smaller, black, sans-serif font to its right. The entire logo is enclosed in a green rectangular border.

Another great source is **Lumen Learning**. This is what we used to create our first OER course for MAT 1010 because they have a textbook editor, lots of materials to work with, and a math homework tool you can use to create homework assignments. Best of all, the textbook and homework materials can be embedded in Canvas. When it comes to publishing, there are a variety of licenses you'll want to familiarize yourself with to make the materials OER. But if you know how Creative Commons licenses work, then you already have a good idea of what to expect.

Another OER option is **Pressbooks** which we used to create our MAT 1020 textbook because they offer a wider variety of templates, and an easier publishing experience. But we still use Lumen

Learning for the homework component. While access to Lumen isn't free, at \$35 per student, we feel it provides great features and value considering how well it complements our OER course materials."



#### 4. WHAT ARE THE NEXT STEPS?

"Overall, using OER has been a great experience and instructors have told us that these new materials meet our department's needs much better, and that students have been more prepared for the next course in the sequence. We're still gathering all the student performance data, but the initial results have been encouraging.

Of course, what's most gratifying is knowing that our students will be better prepared, and that the financial burden being placed on them has been reduced at a time when everything else is just getting more and more expensive. So, if you or your department are looking for a way to develop and distribute cost effective, quality course materials, check out Open Educational Resources. The effort will be worth it."

#### 5. WHO TO CONTACT FOR MORE INFORMATION?

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