

LAKE MICHIGAN COLLEGE

## Teachers bring real world into math instruction

By **RALPH HEIBUTZKI**  
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BENTON HARBOR — Advanced math is tough enough without slogging through all those “ $x+y=z$ ” equations, so Lake Michigan College math instructors Peter Brown and Chris Bendixen are giving it a real world spin in their quantitative reasoning class.

“There’s some algebra, but more modeling of algebra,” Brown said. “There’s a lot of critical thinking, taking problems from the real world and analyzing.”

The new approach also coincides with changes in how math is taught – starting with the order of classes students take.

Under the old system, students took pre-algebra,

introductory algebra, intermediate algebra and pre-calculus/calculus.

Starting this fall, however, the order and type of classes students take will depend on if they’re STEM (science, technology, engineering, math) or non-STEM majors, said Leslie Kellogg, LMC’s vice president of academic services (career and workforce education).

Under the new system, students will start with pre-algebra and a math literacy class. STEM majors will then proceed to intermediate algebra (Math 122) and classes in their fields, while non-STEM majors will take Quantitative Reasoning (Math 123).

“There’s financial literacy, there’s consumer use math.

Say that you’re grocery shopping, how do you figure if buying two of something in a smaller container on sale is a better deal?” Kellogg said. “It’s that kind of applicable real life math.”

Subjects covered in Brown’s and Bendixen’s classes have included credit card rates, subprime loans and stock market performance, among others.

For example, students might have to read an article about the subprime loan industry, analyze a topic and write a paper on it, Bendixen said. Students also learn to work with Excel spreadsheets.

Brown and Bendixen reviewed their work at last month’s LMC board meeting, where students Kaitlyn Mettler, Nicholas Santana

and Sidnee Tyree agreed that taking the quantitative reasoning class has gotten them to think of math differently.

Mettler appreciated the chance to work in groups, which she credited with sharpening her analytical abilities.

She cited a project that required researching various nations’ death rates and seeing how the statistical information applied to each one.

“I learned you have to analyze it more,” she said. “Does the data make sense to the problem at hand, and would the solution make sense to what (the project’s) asking you to do?”

Santana described himself as someone who got by with B’s and C’s in his math classes, because “I hated math all my life,” he said, laughing.



Lake Michigan College math instructors Peter Brown, left, and Chris Bendixen say it’s time to give the subject a stronger grounding in the real world and make it more relevant for students.

Ralph Heibutzki / HP  
Correspondent

Taking the class changed that thinking, especially after he saw how his college loans are calculated, Santana said.

“Now I can see how a \$9,000 loan becomes \$20,000 by paying (only) the minimum balance,” he said. “It’s beneficial to know how to build your credit. This course has helped me do that.”

Tyree, who hopes to run her own business some

day, also enjoyed the class’s strong real world posture.

Her favorite project required choosing and investing in a particular stock, then seeing how it performed over a 20-day period.

“Not only was I learning about math, but I was learning about stuff that was going on in the real world, too,” she said. “It was fun to do a project like that, and learn how stocks work. I had no idea.”