

NROC ANECDOTES FROM THE FIELD: NROC MATH AS A CO-REQUISITE

Central Piedmont Community College (CPCC) in Charlotte, NC, has adapted NROC Developmental Math resources to create supplemental math labs for students admitted to the college under the North Carolina Community College system's "Multiple Measures for Placement" policy.

This policy allows students to place into collegelevel math courses without having to take the North Carolina Diagnostic Assessment and Placement (NCDAP) test if they satisfy three requirements.

To be eligible for the Multiple Measures policy waiver, students need to have:

- graduated from high school within the last five years.
- maintained an unweighted GPA of 2.6 or higher.
- completed four high school math courses from an approved list.

Concerned those students with a 2.6 GPA would have difficulty passing a college-level math course, CPCC created an intervention to help ensure that these students succeed. Meagan McNamee, Discipline Chair and Instructor, Mathematics, developed the NROC component of the Supplemental Math Lab courses that are taken along with SML-MAT 152 (Statistics) and MAT 171 (Pre-calculus Algebra). These one-credit, semester-long labs are required for all entering students with a high school GPA between 2.6 and 3.0 who place directly into math courses under the Multiple Measures waiver.

The NROC math resources that make up the core content of the supplemental lab are delivered by integrating them into the school's Learning Management System (Blackboard). These resources are assigned weekly and provide just-in-time remediation for the topics that are taught in the standard math courses that week. For example, if the Pre-Calculus Algebra class is studying solving quadratic equations, the supplemental lab assigns

the NROC math materials that cover the prerequisite knowledge and skills necessary, such as factoring and completing the square. Students are expected to learn the assigned NROC math material before class.

The SML-MAT 152 and MAT 171 classes are a mix of lecture, collaborative activities, and study sessions. When students come to class, the instructor asks if they have any questions about the NROC materials and then discuss anything they need help on or didn't understand. The primary focus in the class is a combination of lectures and group work related to the pre-calculus or statistics material for the week.

There are approximately 30 students in each Precalculus Algebra class and Statistics class; of this number, there are usually about three students who placed into the class under the Multiple Measures waiver and who are required to take the supplemental math lab.

The first supplemental math lab was conducted in Spring of 2015 and two more were conducted in Fall 2015. According to McNamee, "The overall pass rates for MAT 152 and MAT 171 have not changed much. but that is a big deal as they would have decreased dramatically [due to the lower-level students coming into credit-bearing courses under the new Multiple Measure waiver] without our intervention." McNamee said CPCC plans to continue using the NROC math materials in their supplemental math labs to help support students who place into college math classes under Multiple Measures.



DETAILS

WHO WAS SERVED: Preenrollment college freshmen

WHEN: 2015-2016 school year

IMPLEMENTATION: Co-requisite content for a supplemental math lab for students at risk of doing poorly in their first college-level math class

INSTRUCTIONAL

APPLICATION: Guided use within an on-campus math lab setting

