Personal Story

“I think it’s important that students do not have a chance to disappear,” says Ms. White as she discusses that she wants students to feel noticed and know that someone cares whether they show up to class every day. She also makes her office a place where students can hang out. From her perspective, the students “start to feel comfortable asking each other questions,” exchanging contact information and creating study groups.” Ms. White believes informal meetings in her office at SUNY Morrisville can make students feel welcomed and visible—an important aspect of success for the many first-generation, Black, Latinx, and low-income college students who attend the college.

As a first-generation college student, Ms. White has a history with SUNY Morrisville. She earned an associate degree in mathematics at Morrisville before earning her bachelor’s and master’s degrees in mathematics education as well as a master’s degree in higher education from Syracuse University. She returned to Morrisville in 1995 as an adjunct math instructor and is now an associate professor of mathematics. Throughout her educational journey, she has experienced, “being a female mathematician and constantly having that surprise of, ‘Oh, you like math.’” Comments such as this shape her thinking when she helps similarly marginalized students understand that “it doesn’t matter what your past is, or who people think you are.” From her perspective, what “matters is your passion and what makes you happy and what you believe you can do.”

To start her quantitative reasoning class, Ms. White says, “I let them know how happy I am that they are there.” She then presents the objectives and the math problem of the day. The students take time to read the problem on their own and then transition into groups, which she describes as a “painful few moments of silence, where they need to reach out to each other and ask each other questions and challenge each other.” During this time, Ms. White circles around from group to group to help answer pressing questions, and then they reconnect as a larger class to discuss the problems, solutions, and mistakes.

“Okay, we were going in the right direction and I see where we went wrong…and constantly recognize, ‘It’s okay to make mistakes’ because those are the moments you’ll actually remember.” She describes this process as “the productive struggle,” in which she helps students “transition from a fixed mindset to a growth mindset.” In other words, “when a student says, ‘I just can’t do this,’ we tack on the word ‘yet’—really making sure that they understand where they’re at right now, but [also] the possibility of where they could be.”
Overall, Ms. White wants all her students to understand that they have the ability to complete difficult tasks and that “it is okay to set goals and fail, but it doesn’t mean you have to give up.”

Teaching the quantitative reasoning courses has changed Ms. White. She describes herself as a caring, but rigid teacher, but she now “thinks about her students as people” and says, “[I] really slowed down in terms of my reactions with students of not getting frustrated with them” in order to identify barriers to their learning. Ms. White’s shift is essential as she acknowledges, “we were trained to separate the person from the student,” but now believes “we have to start realizing that they’re one in the same.”

Policy-Related Overview

For many college students, the traditional math pathway can often involve a whole academic year in non-credit, developmental courses. This path disproportionately impacts Black, Latinx, and low-income students. The Carnegie Foundation’s Quantway model was developed to shorten the sequence without sacrificing academic rigor, so students can finish developmental math and earn college credit after one semester. After the 2017-18 academic year, a Carnegie Foundation study on 69 schools found Quantway students were three times more likely than students in the traditional sequence to complete their math courses (Carnegie Math Pathways, West Ed, 2019). In addition to the shortened sequence, Quantway instructors, as Ms. White described, promote collaborative learning through real-world math problems, while also attending to the socio-emotional factors that impact student success. In 2016, SUNY Morrisville adopted Quantway and recently started working with the support of Strong Start to Finish (SStF). Ms. White has been instrumental in successfully scaling up Quantway courses at SUNY Morrisville, from one section per semester to four in the fall and three in the spring. She met with department chairs, advisors, and Information Technology personnel to establish campus buy-in, and recruited and trained six full-time and two adjunct instructors to teach Quantway sections.

Ms. White believes SStF’s initiatives align with SUNY Morrisville students’ needs, as the college is located in a working-class area and attracts diverse students from across New York state. Prior to the Quantway courses, Ms. White saw many of her students sit passively in class, struggle with the content, and then disappear from campus after a couple of semesters. She has found the interactive, collaborative, and personalized Quantway model helps teachers notice when students are missing or struggling and take a proactive approach to engage and retain them.

Reference:

Citation: