

Audrey Colyar, Perry Kong, and Tony Mak

Students, City University
of New York, Borough of
Manhattan Community College

Challenges

- Students experiencing “math anxiety” tend to skip developmental math courses and fall farther behind their peers.
- Professors lack the time needed to offer real-time homework feedback and are often unable to provide one-on-one attention.

Solutions

- Enhanced WebAssign® (EWA)

Results

- Students overcome math anxiety with a digital tool that results in greater student achievement and a sincere appreciation for math.
- Real-time automated feedback immediately identifies and corrects areas of weakness and allows students to work at their own pace.

Students Seek Help for Math Anxiety and Find it with Enhanced WebAssign

Overcoming fear is certainly not an official subject major at the City University of New York, Borough of Manhattan Community College (CUNY BMCC), but for a handful of developmental math students there, it sure felt like it. For students like Audrey Colyar, who suffers from what’s often called “math anxiety”, the fear of failing yet another math class was real.

“I was mad at the college for making me take the course to graduate,” Colyar said. “I was just so nervous and felt I’d never be able to get math so I decided not to show up the first day of class.”

Skipping class due to math anxiety is not uncommon for college students who have histories with mathematics struggles. For instance, Colyar’s classmate, Perry Kong, admits he was paralyzed by the same fear. “Math has always been my weakest subject,” Kong said. “I definitely have math anxiety because I never really learned it when I was younger, so now math is my most feared subject.”

Enhanced WebAssign Empowers Students and Frees Instructors to Teach

Tony Mak, another CUNY BMCC student, wants to help others one day as a paramedic. But first he needed help himself getting through the developmental math course he was required to pass to graduate and ultimately enroll at a four-year school.

Mak is now well on his way and credits Cengage Learning’s Enhanced WebAssign (EWA), a cloud-based learning and feedback tool designed to promote critical thinking, automate the grading process, and provide students and instructors with real-time performance evaluations and results, for helping him navigate the rough waters mathematics can often produce.

Not only does EWA’s automated grading tool give instructors the time necessary to provide individualized attention to struggling students, but it also frees them to show they care deeply about students who often feel neglected. “He confronted me about skipping class,” Colyar said of CUNY BMCC Professor Dale Dawes. “The previous professors were always too busy to help me with my problems but I could tell Professor Dawes really had my best interest at heart.”

Besides EWA’s real time analytics, which help professors like Dawes identify struggling students, the tool also stimulates robust communication with struggling math students who are less likely to ask for help so as to avoid public embarrassment. The Ask My Teacher function is a conduit struggling students can use to proactively contact professors privately and get help much sooner than they might have otherwise.

“It was really easy and straightforward,” Kong said. “Once I saw I was making progress it encouraged me to keep going and to keep learning.”



“It was
the most
successful
program I’ve
ever used.”

Perry Kong

Student, CUNY BMCC

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Customized Learning Environment Immediately Results in Increased Academic Achievement

Students say one of the most effective features of EWA is the real-time feedback they receive on homework assignments. Rather than handing in assignments (like before) and awaiting results, students use EWA to input the answers to math problems and know immediately whether they’re correct.

“If you get a problem wrong the system shows you exactly why you got it wrong,” Colyar said. “I’m like okay, now I know how to fix it and can be sure I really understand before I move on to the next problem.”

Rather than punishing students for incorrect responses, EWA allows an unlimited number of attempts at correctly answering problems. “If I got stuck I would just watch one of the videos,” Kong said. “It was something new every time so it wasn’t tedious or repetitive.”

Professors now know which types of problems students are skipping, answering incorrectly, or answering correctly with ease. Not only does it allow students to work at their own pace and seek individualized attention, but it’s resulting in better test grades.

Classroom Success Sparks Student Confidence and a Genuine Appreciation of Math

Dawes’ students credit their professor and EWA with showing them exactly what they must do to solve the types of math problems they had never been able to solve in the past. “Oh yea, it really helped me succeed,” Mak, the future paramedic said. “I’m actually using some of the formulas Professor Dawes taught me in my health care classes.”

The success and confidence that resulted after implementing EWA prompted Dawes to teach other professors on campus how to use EWA to zero in on common student pain points.

The result is a newfound love for a subject students once feared. “I had such a great experience in pre-Algebra,” Kong said. “So when I saw Professor Dawes was teaching a pre-Calculus class I registered immediately, because I was afraid there wouldn’t be any slots left.”

Even more importantly, the confidence to overcome a lifetime of subject-specific fear is something that’ll likely stick with these students for a long time.



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