Ph.D. Candidate Owes Success to Ramapo Experience

As a student at Ramapo College, Kevin Ng '16 learned that involvement in a variety of activities and organizations on campus would be key for developing critical thinking and leadership skills. Ng, an Economics Ph.D. candidate at Cornell University in Ithaca, N.Y., is taking those lessons learned to complete his studies in a highly competitive field. Following graduation this spring, he will begin a position as a Research Analyst in the Resources and Force Readiness division of the Center for Naval Analyses (CNA) where he will conduct policy and program evaluations for projects to support the Navy and Marine Corps, as well as other sponsors in the Department of Defense. https://www.cna.org/centers/cna/rfr/

The Oradell, N.J., native graduated from Ramapo with a degree in mathematics, and an economics minor, and earned teacher certification in math. He also completed the College Honors Program.

Tell us about some of your research at Cornell.

I research topics in the Economics of Education and Labor Economics. My interest in the topic stems from my experiences at Ramapo where I earned a high school mathematics teacher certification.

My job market paper estimates the effects of K-12 teacher tenure on performance and retention. This paper relies on New Jersey's TEACHNJ Act, which extended the pre-tenure period from three to four years and standardized tenure removals.

I estimate the effects of tenure throughout a teacher's career using value-added, as well as summative ratings, which primarily rely on subjective classroom observations. At tenure receipt, math value-added declines slightly, but performance remains otherwise unchanged. However, later in the career, the removal of tenure protections does not impact performance. Connecting these results, tenure induces a slight decline in productivity at tenure receipt that quickly dissipates.

I also evaluate TEACHNJ's impact on the teacher labor market. TEACHNJ modified tenure standards to rely solely on ratings with scope for subjectivity. The policy disproportionately increased Black and male teacher turnover rates. In the teaching profession, Black and male teachers are already underrepresented relative to their corresponding student demographics. The increased turnover

may harm in-group students, as student outcomes improve when paired with teachers of the same race or gender.

Given few effects on performance along with large declines in diversity, the efficacy of tenure reforms to improve performance is limited.

I created a video for the job market that explains my job market paper on teacher tenure: https://www.youtube.com/watch?v=Y4War1qtwDo&ab_channel=KevinN g.

I also have a coauthored paper that estimates heterogeneous returns to STEM programs in Colombia. We examine how returns to enrolling in science, technology, engineering, and math (STEM) programs vary with students' academic preparation. We find that less-prepared students were less likely to complete a STEM degree than their more able peers, but they had larger earnings returns to enrolling. Our results suggest that policies that encourage less-prepared students to enroll in STEM programs can yield large but unevenly distributed earnings gains.

One of your papers researched aging curves of major league baseball players.

My paper titled "Analyzing Major League Baseball Player's Performance Based on Age and Experience" was published in the *Journal of Sports Economics & Management*. I worked on this paper at Ramapo College, as my Honors Program Senior Project under the supervision of Professor Jason Hecht. This paper served as an introduction to economic modeling and econometrics that guided me toward my Ph.D.

Professor Hecht provided tremendous guidance and support to carefully craft the final project. The paper models player performance as a function of age, experience, and talent. I generated a dataset by collecting publicly available performance data. By modeling aging curves across thousands of observations, I find that performance peaks for the average hitter and pitcher at 29 and 28 years, respectively.

The Cahill Career Development Center at Ramapo also helped me to secure an internship with the Atlantic Baseball Confederation Collegiate League. I worked there for three years and eventually became the Vice President of Statistics and Analytics. I collected statistics, analyzed the data, and managed several interns during my time there.

You were very involved as a student at Ramapo. How did your experiences shape your career path?

Ramapo offers many opportunities to be involved as a student. It also allowed me to explore different interests. For example, I served as the Student Trustee and member of the Student Government Association where I learned about the structure of colleges and their decision-making process. I also worked with tremendous staff and administrators in the Civic and Community Engagement Center, Center for Student Success, and Office of Specialized Services. In addition to the teacher certification program, these opportunities allowed me to practice teaching and engage students. These skills helped me learn how to make my research accessible to general audiences and valuable to policymakers. In each of these opportunities, my critical thinking and leadership skills continued to develop.

What advice can you offer current students who want to pursue a similar path?

I encourage current students to utilize the resources available to them at Ramapo College. The small class sizes and close faculty interaction provides tremendous opportunities to conduct research and explore your interests. I would also encourage students to speak with faculty advisors early and often.