Professor Douglas Cleary reflects on 25 years at Rowan

Professor Douglas Cleary was born in the Chicago area but grew up first in the Cincinnati suburbs and then in one of the more rural counties on the edge of the Cincinnati metro area. Doug moved from a small house on a little tiny plot of land in a subdivision to a five-acre wooded lot at the start of seventh grade. He had to learn a whole new dialect. The accents of many of his teachers, just one county away from his previous city/suburban home, were initially difficult to understand when he moved to an area that was on the border of Appalachia.

Doug's father worked in sales for Proctor and Gamble. What exactly that entailed, Doug never really did understand, but



his father was quite successful at it. His mother initially worked as a bank teller. She went back to school and received a Master's in education and started teaching around the time Doug entered high school. She completed her degree student teaching at the school he attended, which was a little weird.

Doug got all his engineering degrees at Purdue in West Lafayette, Indiana. After the Bachelor's a faculty member asked him to stay on for a Master's, with free tuition and stipend. Doug liked college so he agreed. The same thing happened with his PhD. Graduate students make little money, but if all you know is being a poor college student, it is enough. After the PhD, Doug stayed at Purdue two more years teaching, because his wife was finishing her Doctorate in Veterinary Medicine. After that he worked at Black & Veatch in the Kansas City area for four years as a project engineer in their Special Projects Group. This group worked exclusively on governmental projects such as lock and dam work for the Corps of Engineers or analysis of wind tunnel components for NASA. Doug missed teaching and university life, so he took a shot at a job at a new upstart university starting an engineering program and has been at Rowan ever since.

Professor Cleary arrived at Rowan in 1998. He is a Professor of Civil and Environmental Engineering. He has teaching, research, and administrative duties.

My entry into the field of Civil Engineering was typical. Somewhere along the way I was involved in a bridge building competition and that sparked an interest. Then I found I was actually pretty good at Civil Engineering in school, so I stayed with it. I never expected to become a professor even when I was getting my PhD. After being away from the University setting however, I realized I wanted to go back to that.

I came to Rowan to put my stamp on the development of a new engineering program. I felt I was good at teaching and that I had learned some things in industry and through my experiences at a large research university that would be valued here. The faculty camaraderie during the early years was very special, including beers with faculty from across the University on Professor Everett's deck.

In the early days at Rowan, the faculty was small and we had to create everything, including the curriculum. Most of us taught classes that were being offered for the first time. That meant nearly every semester you were preparing and teaching a new course. There was a lot of friendly interaction between the faculty in all the departments. The classes were small and the students within the CEE major pretty much had the exact same classmates in every class, every semester. There seemed to be an unwritten rule that the students were going to drag their peers along with them through the courses, so I very frequently observed students working in groups and making sure everyone understood what was happening in class. Engineering was the new kid on the block and at times there was some friction with other parts of campus as they saw the resources going into the program. With time, those barriers were also broken down.

Engineering Clinics¹ were, and remain, a unique piece of the Rowan Engineering Experience. I was not a "true believer" when I arrived but figured I could make the best of it and find some ways to give students unique learning experiences. I've always been connected to members of the local engineering community through ASCE and over time, as I heard the praise they had for our graduates, I came to realize the clinics were a very different way of learning; they gave our students a chance to put their knowledge into practice far earlier than in a typical curriculum, and helped produce a graduate very ready to learn on their own in industry or graduate school.

We are much larger now, and the focus and reward system has certainly shifted as we transition from a primarily undergraduate teaching program to an R1² research program. The Civil Engineering industry has evolved, although perhaps not enough, to become far more inclusive. Certainly, sustainability and the climate have become something the industry thinks about more than it used to. I think students are probably more financially stressed now than they were when I was a student and more than they were in the early days of our program.

It is difficult for me to talk about a single memorable memory from my time at Rowan. It is more about the relationships I have developed with the faculty and staff and the students throughout my time here. I advised ASCE for most of my career and the first couple of trips to steel bridge or concrete canoe nationals were unique experiences. For the trip to San Diego, some of the team rented an RV and strapped the canoe to the top of it and drove across country. The only stipulation from the RV company was that if anything went wrong, the canoe should not be on the top of the RV when help arrived. Sure enough, they had a flat crossing the desert on their way back. Before calling for help, they removed the canoe from the top of the RV. Somewhere in the western deserts there may still be a national caliber concrete canoe sitting off from the side of the road. In the northeast, we don't start to get tan as early as other parts of the country. At our trip to canoe nationals held in Madison, Wisconsin, one of our team members received the "pasty white boy" award from the hosts and judges.

But it is more about times like when my daughter decided she was ready to be born 3 weeks early at 4 am and I knew I could call up Professor Jim Newell and Heidi and that Heidi would be at the house in 20 minutes to be there when my son woke up. It has been a joy seeing the success of our students in their careers and feeling like I at least had some part in that, however small. In industry you see your work being built. In this job you see how you, hopefully, helped someone else grow into their career.

It has been a wonderful experience that I am glad I had. It is really hard to picture how different my life might have been if I had stayed in industry. As I look toward retirement, I'm ready to move to a new phase in life.

Written by Douglas Cleary and edited by Jess W. Everett in February 2024

- 1. Engineering Clinic is a hallmark of Rowan University. Students take a Clinic class each semester, eight total. Many are interdisciplinary. All are hands-on. First-year Clinics focus on engineering's place in society and fundamental engineering skills. Sophomore Clinics merge communication coursework with an engineering design experience and are team taught by engineering, writing arts, and rhetoric faculty. Junior and Senior Clinics have students work in teams on research or design projects, usually externally funded.
- 2. The Carnegie Classifications are a way to categorize Universities. R1 universities have Very High Research Spending and Doctorate Production. Rowan University was R3 when the College of Engineering started in 1996. As of February 2024 it is R2. It will become R1 in the near future.