Under Davis’ tutelage, area math team divides and conquers

His squad of high school math students was crowned national champions at the American Regions Mathematics League competition.

Don Davis is one very proud coach. His office on the third floor of Christmas Saucon Hall is lined with plaques. Photos of high school kids in matching t-shirts and matching grins decorate the walls. A DVD of his team’s last competition literally brings tears to his eyes. And he recounts with great enthusiasm the colleges where former team members have recently landed—eight at MIT, six at Harvard, three at Yale. Six former team members have also joined Davis at Lehigh University.

On May 30, Davis, a professor of mathematics, found out for the second time what it feels like to coach a national championship team. His squad of high school math students took first place at the American Regions Mathematics League (ARML) competition held at Penn State. The team’s first national championship came in 2005.

Coaching has become a passion for Davis, who began holding a regional math contest at Lehigh 29 years ago. In 1993, the contest’s winner suggested Davis form a team to compete in the ARML, which brings together some of the nation’s top mathematics students for individual and team competition. The student’s father, Lehigh alumnus John Miller ’69, committed his company Keyelons Consulting Engineers as a team sponsor.

Now, 17 years later, over 250 students have had the opportunity to develop their skills in mathematics, problem-solving and teamwork.

"I get to work with these wonderful kids who are just like I was," says Davis. "I watch them grow and work with them for five years. I know I’m doing something really important. I tell everyone that this is the most important thing I’ve done in my life."

The competition, held concurrently at Penn State, the University of Iowa and UNLV, is the Super Bowl of high school math competitions. Davis fields four teams of 15 students under Team Lehigh Valley—Fire, Ice, Lightning and Thunder. The teams are comprised of students from the Lehigh Valley, Philadelphia, New Jersey and Northwest Pennsylvania, who practice throughout the academic year at Lehigh University. This year, the Fire team was crowned national champions, while the Ice team placed third in Division B.

The team’s success stems not only from Davis’s passion for the team, but also the Lehigh faculty and alumni who over the years have lent their support to assist regional high school students. "These 2,000 math students see the Lehigh Valley winning," says Davis. "They have to associate that with Lehigh and think that Lehigh University is a good school."

Through his company Aggregate Knowledge, Lehigh graduate Paul Martino ’95 has provided significant

-Image of Don Davis
-Image of team members
sponsorship of the team for the past three years. His support allows 60 area kids to travel to and participate in the national championship. Marino’s wife also helped secure funding from her employer, Google, which Davis is excited to name as a new sponsor.

Davis, who meets with team members on Sundays to run through rigorous practice questions, receives assistance from a former student, Ken Monks, professor of mathematics at the University of Scranton. Monks, who completed his Ph.D. at Lehigh, first began to contribute his expertise as a coach when his daughter Maria joined the team. Maria, now a student at MIT, received this year’s American Mathematical Society’s Alice T. Schafer Prize for Excellence in Mathematics by an Undergraduate Woman. She has been replaced on the team by her brother.

“If they like math, they come here and find other kids like them,” says Davis. “Parents appreciate the opportunity for their kids to work with other kids.”

James Dearden, Lehigh professor and chair of economics, credits his son Will’s interest and success in math to his experience with the ARML team. Will Dearden graduated at the top of his class this year and plans to attend Lehigh in the fall.

“Over the three years that my son Will has participated on the teams, I watched his attraction to mathematics move from a curiosity to a keen interest,” says Dearden. “As a game theorist (an area of applied mathematics), I understand quite well the importance to math majors of learning the art of doing proofs and building an understanding of mathematics. The ARML competition and the training of the Lehigh Valley teams is great practice for becoming college math majors.”

--Tricia Long

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