

# Welcome Back



# Welcome Back

I am the “I” in Innovation

J.D. Rottweiler, Ph.D.  
2019 Convocation  
August 12, 2019

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- Convocation is derived from a Latin term that literally means, “to call together.”
  - The original function of convocation was to assemble a group of scholars to hear, to express opinions, and to reach agreements through the exercise of free discussion.
- Today we need to begin a discussion:
  - about INNOVATION
  - and our MISSION, VISION, VALUES, and PURPOSE

# Convocation:

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- **Innovation** = introducing something new
- **Innovation** = improving an existing idea or process
- **Innovation** = problem solving
- **Innovation** = disruption of the Status Quo
  - Any attempt to maintain the status quo is certain to failure

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## **2018-19 in Review**

- Completed our 54th year of Educational Services in Cochise County
  - 1,596 Associate Degrees Awarded
- Expanded educational opportunities across the District:
  - Cochise County Senior Scholarship Guarantee
  - Enhanced Educational Partnerships
    - Navigators
    - Dual Credit initiatives with High Schools and Cochise Technology District
    - K-12 partnerships
    - University Transfer
- Faculty Support Center
- Student Completion Initiatives
  - “Game Changers”
  - Mandatory Advising
- New/Expanded Programming

# Looking Back and Looking Forward

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# PTK CONTRIBUTES TO COCHISE SUCCESS

When you see Jennifer Wartz walking the High Desert Nature Trail and inspecting bird boxes near the Cochise College Sierra Vista campus, it's hard to remember her role as the Director of Events and Auxiliary Services for the institution.

Wartz is responsible for organizing and scheduling all the classrooms, meeting rooms and other facilities for Cochise College. She also serves as an advisor for one of the two Phi Theta Kappa (PTK) chapters at the college called Alpha Mu Zeta. PTK is a premiere international honor society with more than 3.5 million members in the United States and both chapters at the college are 5 star chapters, the highest rank a chapter can receive.

Although both roles are important, it's her service as an advisor that has recently brought recognition and impressive honors to several Cochise College students. Wartz works with about 25 students who undertake projects that are both educational and beneficial to the community.

"There are lots of requirements to qualify as a five-star Phi Theta Kappa chapter and include a research project called Honors in Action and the College Project, which must benefit the campus in some way," Wartz said in a recent interview. "Our students have been remarkable in what they have accomplished."

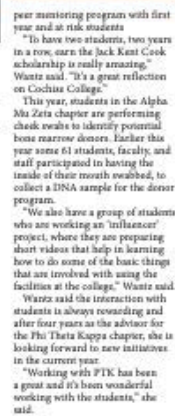
The success of the local chapter on the Sierra Vista Campus has been confirmed by the achievements and awards earned in recent years. Two Cochise College students have received Jack Kent Cook Foundation scholarships, a prestigious national award that recognizes the best academic performers who are making a difference in their community.

One of the projects for the chapter is the reason Wartz can sometimes be found walking the nature path just outside her office on the Sierra Vista campus.

"I'm not a biologist, but I have to admit that I've learned a lot about native song birds and their nesting behaviors because of PTK and the students' interest in a topic," she quipped.

Last year students erected five nesting "boxes" along the trail, then continuously monitored the activity of song birds that frequented the sites. The project earned an honors study topic regional award from the honorary society.

"That was the first time we won



Jennifer Wartz, Facilities Director and advisor to a Phi Theta Kappa chapter at Cochise College, stands with one of the projects undertaken by students participating in the chapter.



regional award for an Honors in Action project since I have been an advisor, so it was pretty exciting," Wartz said.

It was also one of the reasons that the student who took the lead on the project, Yassine Fouchal, earned a \$40,000 per year Jack Kent Cook scholarship for up to three years.

"Having that project on his application, along with his high academic record and other activities, made a difference," Wartz said.

Even though the school year ended and technically, the bird box project was completed, Wartz said the activities of the song birds are still being monitored. She credits the participation of a local ornithologist, Kate Scott with the Madras Archipelago Wildlife Center, who traveled from the Sonoma area and volunteered her time and travel expenses to help with the project.

A second student, Maria Scaff, was awarded the scholarship in 2018 in part for her work on a college project involving a peer-to-

peer mentoring program with first year and at risk students.

"To have two students, two years in a row, earn the Jack Kent Cook scholarship is really amazing," Wartz said. "It's a great reflection on Cochise College."

This year, students in the Alpha Mu Zeta chapter are performing cheek swabs to identify potential bone marrow donors. Earlier this year some 61 students, faculty, and staff participated in having the inside of their mouth swabbed, to collect a DNA sample for the donor program.

"We also have a group of students who are working on an 'influencer' project, where they are preparing short videos that help in learning how to do some of the basic things that are involved with using the facilities at the college," Wartz said.

Wartz said the interaction with students is always rewarding and after four years as the advisor for the Phi Theta Kappa chapter, she is looking forward to new initiatives in the current year.

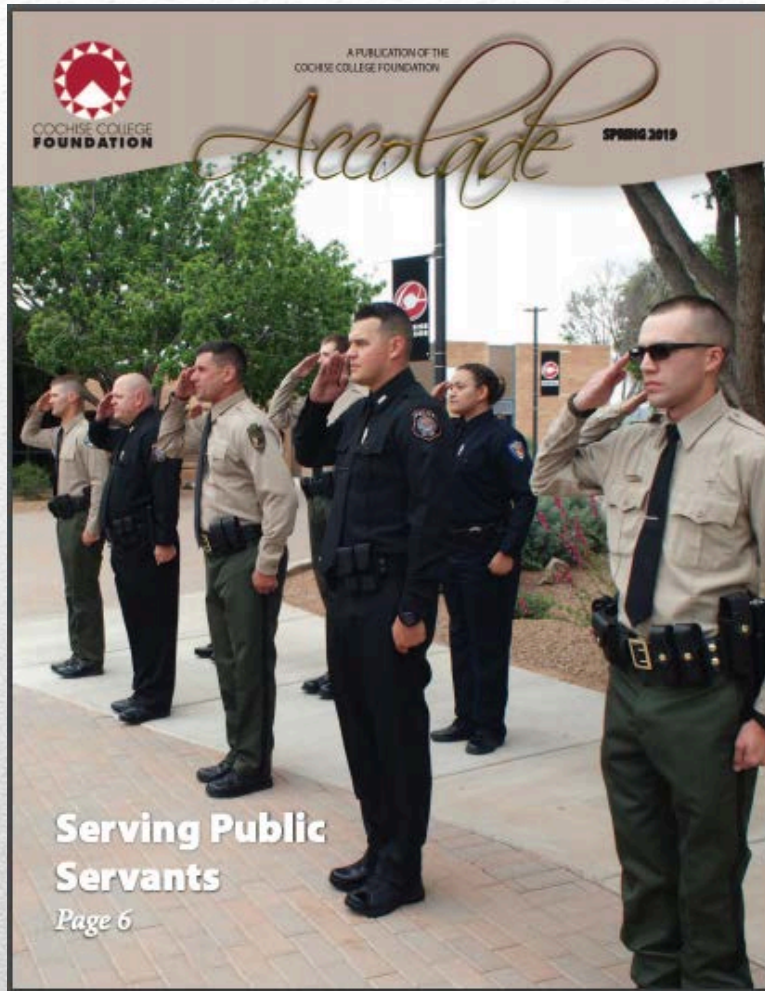
"Working with PTK has been a great and it's been wonderful working with the students," she said.

# Student Success

- All-Arizona Academic Team (2019)
  - Paulette Iniguez: First Team
  - Yassine Fouchal: First Team/Coca-Cola Gold
  - Guillermo Gamez Cordova: Second Team
  - Joshua Novinger: Third Team
- Jack Kent Cooke Scholars
  - Maria Scaff (2018)
    - University of California, San Diego
      - Biomedical Engineering (Genetics)
  - Yassine Fouchal (2019)
    - Purdue University
      - Aerospace Engineering (Astronaut)

# Phi Theta Kappa

- Alpha Beta Zeta (Douglas)—5 Star Chapter
- Alpha Mu Zeta (Sierra Vista)—5 Star Chapter



# Academy draws law enforcement trainees to county

By Eva Dickerson

The Cochise College Southeast Arizona Law Enforcement Training Academy (SEALETA) issued its first certificates to nine recruits in May. The 17-week academy drew recruits sponsored by five law enforcement agencies across Arizona.

Students enrolling in the intensive course first passed the requirements to become sworn law enforcement officers. Sponsoring agencies pre-screened enrollees using a detailed background check, polygraph test and medical exam. Recruits also passed a series of instructional block exams and exhibited proficiency in skill-based exams, including firearm use, emergency vehicle operations, subject control tactics, and other job-related skills. The rigorous, 680-hour course included completion of the Peace Officer Physical Aptitude Test (POPAT), and students earned 30 college credits.

Once the physical and cognitive tests are successfully completed, each recruit must also complete

Recruits practice at an off-campus shooting range under the supervision of trained law enforcement personnel.

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# EDUCATION IN ACTION



Cochise College students enrolled in the Residential Construction Technology Program finished the year with something to show for their work.

**A new home:** Beginning last August, the 12 students who completed the course built a 1,420-square-foot single-family home on North Second Street in Sierra Vista. The three-bedroom, two-bath home has already been sold and planning has already started for another project in the coming school year.

"This was our first home and we learned some things," said Dr. Rod Flanigan, Dean of Business and Technology at the college. "We anticipate making some changes to push back the completion date and allow the students to participate in the construction process through to the end."

Dr. Flanigan credited the community's help in making the project a reality. Local contractor Burkhead Diversified Industries cleared the property, while real estate developer Casle and Cooke donated architectural plans, light fixtures and painting of the house.

The Cochise College Foundation sponsored the project, securing special financing for the construction from American Southwest Credit Union.

"It was impressive that the community came together to make this happen," said Dr. Flanigan. "Building a new home on North Second Street is a great way to revitalize this neighborhood and contributes to higher property values for surrounding homeowners."

Beginning last August, students worked Monday through Thursday under the direction of tradesman and faculty member Doug Schlaubman to complete the project. The class included four military veterans, and a woman who has a PhD in another area of study.

"She wanted to learn about construction and everything that's involved with building a new home," Dr. Flanigan said. "She's been a great recruiter of new students for the program."

Graduates of the two-semester course received a certificate in residential construction technology and are eligible to apply the credits earned toward an Associate's Degree.

"The students learn just about everything there is to know about residential construction except for plumbing, electrical and HVAC," Dr. Flanigan said. "They did the tile, the finish work, the framing, the concrete, and all the sheet rock among other things."

Seven students have already enrolled in the program for the upcoming school year and planning has started for construction of a new home immediately adjacent to the existing property.

"The next home will be a mirror image of this one," Dr. Flanigan said.

Dr. Flanigan joined the Cochise College staff earlier this year, after earning tenure during his seven years at the University of Nebraska, in Lincoln, Nebraska. Prior to that, he had a 25-year career in manufacturing, owning a company before selling the firm and getting into education.

"I believe in the community college system," he said. "For people of all ages, community colleges are providing a skill set they can actually use in life," Dr. Flanigan said.



Dr. Rod Flanigan, right, Dean of Business and Technology at Cochise College, and Building and Construction instructor Doug Schlaubman, stand in the kitchen at the newly-completed home built by students enrolled in the school's Residential Construction Technology Program.



## Residential Construction Trades



**CONSTRUCTION PROGRAM HELPS BUILD VIABLE CAREER CHOICES**





# Automotive Technology Building



## SIGNS OF SUCCESS

COCHISE COLLEGE PROGRAM FEEDS SKILLED STUDENTS TO LOCAL DEALERSHIPS

Success in education has numerous definitions.

When students find a future profession after inserting gears in their education, that's success.

When local businesses hire graduates and invest in new technology to keep pace with the industry, that's success.

When a program needs more space and plans for the construction of a new facility, that's another sign of success.

By those measures, the Automotive Technology program at Cochise College is a complete success.

Currently located at the southeast corner of Highway 92 at Buaby Drive in Sierra Vista, the program has been training students at the facility since 2012 in light truck and passenger vehicle repairs and maintenance.

But that's about to change.

"We're anticipating that a new facility will be constructed on the Cochise College campus in Sierra Vista and we hope to move there by August of 2020," said Dr. Rod Flanagan, Dean of Business and Technology at the local community college.

James Krause, chairman of the Career Technical Education department, said the automotive technology program has already reached its student enrollment capacity for the 2019-2020 school year and has "run out of room" at the current facility.

"We offer five classes per semester and we cap the classrooms at 36 students," Krause said. "We also offer daytime and night classes, but we're still running out of space at this location."

Krause said graduates of the program are "working all over town," at local dealerships, in automotive parts stores and in repair shops.

"This program has a close working relationship with local businesses," Krause said. "We get a lot of good, positive feedback on the program from the community," he said.

The property where the existing program is offered was provided by Sma and Kate Lawley, operators of numerous dealerships in Sierra Vista and other area



communities. Prior to their acquisition of the site, it was the location of the Meral dealership. Dr. J.D. Ruttwiler, president of Cochise College, said use of the property was effectively "donated" and facilitated the development of the automotive technology program.

"We can't say enough to appreciate the

specifically for Cochise College.

"Sen. Gowen was able to designate about \$3.3 million in the state budget for the college that we plan to use a portion of for the construction of the new facility on campus," Ruttwiler said.

Krause said the new facility will provide more space for more students and allow the program to continue growing. He added that much of the state-of-the-art equipment in the existing facility will be moved to the new facility when it's available.

"It will basically double our usable shop space and provide enough classroom space so we can offer the program all in the same building," he said.

Students can earn a certificate when they complete one year of the Automotive Technology program, or they can earn an associate degree when they finish the full two-year curriculum.

"We have students who have graduated and started working at a local business, and then the owner of that business goes out and buys new equipment to capitalize on what the kids are learning here," Krause said.

For Cochise College, that's another sign of success.



## Student Success

- Jacob Staggs
  - DoD Cyber Scholarship
    - Tuition/fees + \$25,000 stipend
    - Guaranteed Internships + Job

## Whiz kids show their cyber skills: CyberPatriot competition showcases cyber security

By Jamie Verwys jamie.verwys@myheraldreview.com  
Feb 2, 2019



Dan Guilmette, Cochise College Cybersecurity Program Coordinator.

## COLLEGE INVESTS IN CYBERSECURITY program

For Dan Guilmette, the Cochise College Cybersecurity Program Coordinator, defense is the best offense.

Now in his fourteenth year as the head of the two-year program, Guilmette started his career in computers as a junior college learning data processing on early iterations of a technology that today dominates daily life. He was hired by Cochise College in 2003 and one year later wrote the first degree program in information security.

In 2013, the program was modified to a cybersecurity degree.

"We focus on the defensive side," Guilmette said in a recent interview. "We teach how to defend a network or a computer system and how these attacks happen."

Enrollment has steadily increased in the program, with 186 students declaring cybersecurity and networking as their major for the 2017-18 school year, Guilmette said. Once general education requirements are met, a student has to complete 13 "core" courses to earn their Cybersecurity Associate of Applied Science degree from the college.

Those who successfully complete the program have a good chance of landing a job, Guilmette said.

"It depends on the individual student.

Those who dedicate themselves usually have little problem getting a job, but it really depends on what's available in the market, and where it's available when they graduate."

Guilmette said he and other Cochise College officials meet every year with local employers to discuss what's happening in the private and public sectors.

"We're constantly tweaking the program to keep it relevant for employers," he said. "Here, with Fort Huachuca, we're going to be more government-focused, but with this degree, a student doesn't have to work here, the skills are transferable."

Guilmette said a number of graduates are now working for area city governments, at the fort and for Cochise County.

As the program continues to expand, Guilmette said Cochise College has made significant investments in hardware, software and additional faculty to provide enough resources for students both in classrooms and online.

The three-room suite where the program is based from on the Sierra Vista campus is the first location where equipment doesn't have to be set up and torn down before and after each class, Guilmette said. A recent remodeling has added racks for computer hardware and outfitted classrooms with what is needed

to broadcast and record classes for online presentation.

Two new faculty members have been added to the program and will start this fall. "Our classes are all 'hands-on,' which is what has made it difficult to put everything online," Guilmette said. "The investment made the college has allowed us to improve our set up so students can now connect securely and practice and do their assignments using virtual machines."

The improvements put Cochise College "... in the upper quarter" of schools offering comparable programs, Guilmette said.

"The college has put a lot of resources here and we've been frugal in stretching what we have so we can get the most out of it."

Interest in cybersecurity has grown beyond the college and now starts with kids getting involved in the CyberPatriot program at area middle schools. Guilmette credits the work of Sierra Vista resident Ross Lampert in growing the CyberPatriot program.

"He really got it started and when I got involved there were three or four teams about five years ago," Guilmette said. "Now we have 25 teams from local middle schools and high schools."

CyberPatriot is an after-school activity for students offered across the country and organized in part by the Air Force Association. The program features a national competition, with finalists meeting in Washington, D.C., to determine a winner. During the six years that the program has been organized in Cochise County, two Sierra Vista teams have qualified for the national finals.

"It started with about 500 teams across the country and now it's up to more than 5,000," Guilmette said.

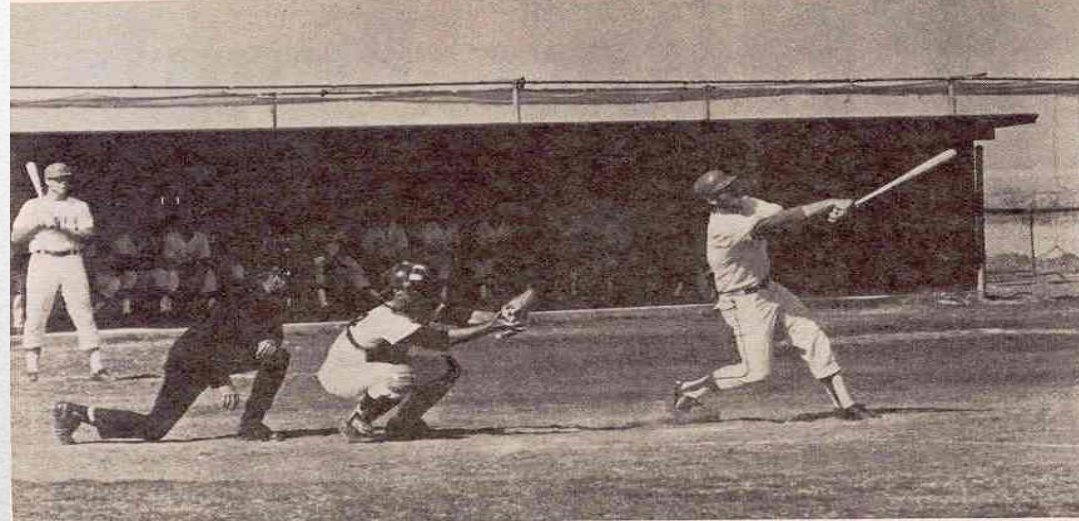
Involvement in CyberPatriot has, in part, fueled more interest in the Cochise College program, Guilmette said. He said there is a genuine enthusiasm among older students to help younger students.

"We could easily make our degree program 80 credits, increasing it from what it is now at 67 credits, by adding electives," he said. "It just comes down to time. Eventually, with the investment that's been made in online and having more servers, there will be greater flexibility for students and we will be able to keep expanding."



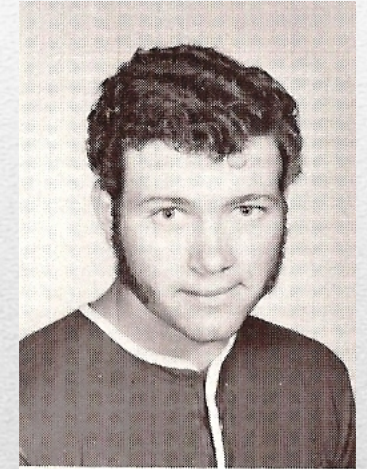
# • The PEOPLE

- An unwavering Faculty and Staff committed to putting "Students First"
  - Dedicated People
  - Diverse People
  - New People
  - Old People
  - Energetic People
  - Smart People
  - Creative People
  - Innovative People



**Bo's Bat Booms**

While Dick Bradley and the CC bench look on, Bo Hall displays the type of talent that made the Roughrider Easter Tourney a successful one for the Apaches. CC placed second with a 4-1 record.



## What I LOVE about working at Cochise College

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- **Innovation** = introducing something new
- **Innovation** = improving an existing idea or process
- **Innovation** = problem solving
- **Innovation** = disruption of the Status Quo
  - Any attempt to maintain the status quo is certain to failure

I am the "I" in Innovation

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The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew.

Abraham Lincoln

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# How do we rethink . . . .

- what it means to be educated?
- our degrees and certificates?
- our use of technology?
- our classroom settings and structures?
- the role of the faculty?
- everything?

Innovation – starts with a question:



# How do we design a 21<sup>st</sup> Century Learning Institution...

- that provides Individualized and Personalized Education?
- with no diminishment of Rigor?
- with no diminishment of Quality?
- with no diminishment of Impact Potential (individual and community)?
- built around a population that is not operating from a Single Cultural Model?
  - not a single socio-economic set of assumptions

Innovation – starts with a question:

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# How do we modernize fast enough....

- to capture the breadth of Student Energy?
- to capture the breadth of Learning Modalities?
- to capture the breadth of Intelligence Types?
- to capture the nature of Ubiquitous Information and Communications?
- to find ways to teach and educate in Adaptive and Active formats?
- to keep our County, State, and Region vibrant and economically healthy?

Innovation – starts with a question:



#### OPPORTUNITY YOUTH

Percent of 16-24 year olds in Arizona that are NOT going to school or working.



#### POST HIGH SCHOOL ENROLLMENT

Percent of Arizona high school graduates who enrolled in postsecondary education the semester after graduating from high school.



#### ATTAINMENT

Percent of Arizona residents 25-64 years of age who have completed a 2- or 4-year degree or received a postsecondary certificate.

# Innovation = Problem Solving:


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- Mission
- Vision
- Values
- Purposes

Innovation = new/improved/reaffirmed

- I have to be willing to consider new ideas
- I have to be willing to act on those new ideas
- I have to recognize new possibilities
- I need to be willing to change.

In the End...I am the "I" in Innovation



Cochise College provides accessible educational opportunities that are responsive to a diverse population and lead to constructive citizenship, meaningful careers, and lifelong learning.

College Mission

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