

CCC PAGE LEARNING CENTER FORMS

Page, Ariz. — Four educational institutions formally created a partnership on April 27 to strengthen higher education for the benefit of residents in the northernmost parts of Coconino County.

Officials from Coconino Community College, Diné College, Navajo Technical University, and Northern Arizona University met to sign a Memorandum of Understanding to create the Higher Education Consortium Project (HECP). CCC has offered educational opportunities in northern Arizona at the College's instructional site in Page since 1997, and now, the site will also serve as the home for this collaborative initiative.

Coconino County Supervisor Lena Fowler began meeting with leaders from each of the institutions to discuss ideas to coordinate offerings for students in northern Coconino County in order to provide more educational opportunities while preventing overlap of services.

CCC President Colleen A. Smith said, "I'm a strong believer in collaboration. That's how we serve our communities and how we provide great educational opportunities to our students. This is really all about the students."

When Dr. Smith approached Supervisor Fowler a year ago with the idea, Fowler noted that she had the idea for a similar project and had approached the colleges

and the city of Page in the past.

"This has been a vision and a dream for several years," Fowler said. "And today is the day that we're actually going to begin establishing the Page Higher Education Center."

Fowler added that by establishing the Page Higher Education Center, northern Coconino County residents will be able to keep their students close and their families and communities together as the students train to gain the skills for jobs in their communities.

"NAU has had a rich tradition of reaching out across the state of Arizona to rural communities

See **LEARNING**, Page 4

CCC dedicated to helping Page economic future

Page, Ariz. — Residents of Page and northern Coconino County met to discuss the future of the region's economy, and Coconino Community College plays an important role in that future.

The Regional Economic Outlook Conference, hosted by the Page-Lake Powell Chamber of Commerce, took place May 18 in Page. More than 100 service agency, governmental and business leaders met for a sobering assessment of the region's economy. The goals of the conference were to share

information, generate ideas and strategies for future economic development of the region, and gather people interested in forming a "united vision in light of the impending closure of the Navajo Generating Station."

Wade Rouse, PhD., of Northern Arizona University gave the audience a big-picture outlook of the U.S. economy, which is not robust and has been the weakest recovery out of a recession ever. In

See **ECONOMY**, Page 4

Hunting the DNA of GMOs



Students in the BIO 100 class at CCC recently investigated whether their food contains genetically modified organisms.

Flagstaff, Ariz. —

The students gather at their stations in the classroom. Their safety goggles are on, and their latex gloves ensure pure samples.

"Draw the liquid up, and we're going to put it on wax paper," says Christina Baze, general biology instructor at Coconino Community College. "Twenty microliters. Touch the tip to the wax paper. One bead. Now, it's touched something, so it's no longer sterile. Put it in a used beaker."

The students, part of BIO 100, are attempting to discover whether the foods they eat have been genetically modified as part of their studies. The exercise has been made possible with the purchase in March of several pieces of equipment from Bio-Rad

Laboratories, including a thermal cycler.

"With a thermal cycler, you can amplify DNA," Baze says. "The students extract DNA from a food product and amplify target sequences common in plants and genetically modified plants."

The samples are run through a process called gel electrophoresis to separate DNA fragments based on size.

"If the target sequence was present and was amplified, it will show up as a band," Baze says. "And if they see a certain band, they will see that it has a genetically modified organism (GMO) crop in it."

The lab is part of a series of four labs, Baze adds. In the first lab, the students actually do the DNA

extraction from purchased food.

During the second lab, the students amplify the samples with the thermal cycler. The third lab runs the samples through the gel electrophoresis. The final lab is a discussion on the pros and cons of genetically modified crops.

"I assign them a side to the debate," Baze says. Either the food is "safe" or "not safe." "That forces a lot of them to step outside their own perspective and objectively research the facts."

The lab series is a critical thinking project to teach the students how to evaluate sources, Baze says.

"There are so many things out there where the credibility is suspect," Baze says. "Especially on this topic. It's just everywhere."

See **DNA**, Page 4

Fowler gets CCC Award for 2017

Flagstaff, Ariz. — Coconino County Supervisor Lena Fowler has been selected as the 2017 recipient of the prestigious Distinguished Service Award at Coconino Community College.

Supervisor Fowler was selected for her outstanding contribution to the mission of CCC.

"It is a great honor to work with Coconino County Supervisor Lena Fowler and share in her vision," said CCC President Colleen A. Smith. "She doesn't just talk about issues; she gets things done. Supervisor Fowler is dedicated to serving Coconino County and has shown her commitment in bringing forward higher education opportunities. We at CCC are grateful for all her support."



Lena Fowler

Supervisor Fowler is now in her third term as supervisor for District 5, which includes Tuba City and the city of Page. Being Navajo and raised traditionally, Fowler has lived in Tuba City for more than 25 years and has been a part of a wide array of community service projects. She worked in the Office of Continuing Education and Diné College; was a founding member of Tuba City Concerned Citizens, an organization devoted to cleanup of uranium mine tailings; was a founding member and vice president of Tuba City Regional Health Care Corporation Board of Directors; was president of the Association for Indian Self-Determination in Healthcare; was president of Navajo United Way, Inc., and much more.

In recent years, she has been heavily involved in the development of a Higher Education Consortium Project located at the CCC Page Instructional Site. The project brings together CCC, Diné College, Navajo Technical University and Northern Arizona University to provide higher education and job training to residents of northern Coconino County.

"I am greatly humbled and honored to be receiving the Distinguished Service Award from Coconino Community College," Fowler said. "Establishing the Page Higher Education Center has been a vision and a dream for quite some time. With dedication, collaboration and time, the dream has come true. Being recognized by CCC will add to our ability to implement

See **FOWLER**, Page 2

Jones Benally family shares Diné traditions with CCC

Flagstaff, Ariz. — The Lone Tree Campus welcomed the Jones Benally Family on Feb. 23, to an event that was hosted by the College's Native American Student Association.

The Jones Benally Family is an internationally acclaimed traditional Navajo performing group. The patriarch of the family, Jones Benally, is a world-famous hoop dancer and medicine man. He grew up at a time when Navajo traditions were frequently practiced, and he now travels around the world sharing those rituals. Jones Benally and son Clayton Benally shared traditional stories, rituals and games with the CCC audience.

The games they shared were not simply games at all; their games refer to the tradition of teaching stories and rituals to the next generation. Playing string and stick games act as a tool to remember and retain the stories they have been taught about the Navajo culture.

"I organized this to share a taste of Navajo culture with CCC students," said Elliott Cooley, President of the Native American Student Association at Coconino Community College.

Clayson Benally stressed the importance of the games as oral messengers. The stories that the Navajo people have today were passed down solely through oral expressions. They have not been transcribed or translated, primarily because the English language does not always have the words to describe Diné rituals effectively. Sharing their stories is pivotal to the culture because it is a way of remembering their history and ritual.

"At CCC, we have a high population of Native American students," said Brian Francis, Director of Academic Advising. "This event is another way of saying that we appreciate their culture, and this is a part of their home. They are a part of this community, and this is where they come from."

More information about the Native American Student Association on campus may be found at: <https://www.facebook.com/Native-American-Student-Association-Coconino-Community-College-273312276026486/>.



— **Makenna Allen**



Clayson Benally, left, shares traditional Diné culture with CCC students and stresses the importance of games in telling stories at an event at the Lone Tree campus on February 23, 2017.

Neil Gallegos, Community Servant

Flagstaff, Ariz. — He was considered one of those kids who probably wouldn't make it. But at 17, he decided he wanted to do something productive for others, so he joined the Sunnyside Weed & Seed organization and used his outgoing nature, his passion and his heart for others to make a difference in young people's lives.

Years later, now a Coconino Community College student with a family, Neil Gallegos was among several people honored March 31 during a recognition breakfast sponsored by the Coconino Hispanic Advisory Council for his service to his community.

"This is a cool thing, a humbling thing, something that's worthwhile," Gallegos said during a break from studying for his CCC economics class. "Because if I don't participate and engage with people and organizations to get positive progress in our community ... who will be a real, tangible example?"

Gallegos and three other students received recognition in front of more than 100 people during the third annual Cesar E. Chavez Community Recognition Celebration. Among the speakers at the event were Coconino County Supervisors Liz Archuleta and Art Babbott and Flagstaff Mayor Coral Evans.

Gallegos' list of accomplishments include: Working with high-risk



Flagstaff Mayor Coral Evans congratulates CCC student Neil Gallegos.

youth as a chaplain and counselor for Turnaround Youth; working with high-risk youth as a volunteer motivational speaker at Coconino High School, where he encouraged academics and good school attendance; volunteering as a councilmember for the Southside Steering Committee; and serving as the lead Marketing Representative and Youth Group Mentor for the Sunnyside Weed & Seed program; and so much more.

"I'm looking at the long run, you know?" Gallegos said. "I want the opportunity to help the next generation make smart choices for good outcomes in their lives."

Completing college is a way

to set an example, Gallegos added. It's a way to walk the talk. At 19, he'd had a family and landed a good job. He'd always been interested in data, business, politics and more, so he eventually decided to get busy going back to school. A CCC2NAU student, he's currently studying to get his associate degree in business. A master's degree in business is the ultimate goal - a major broad enough to open up opportunities for employment in the future.

"I want the opportunity, through education, to go wherever I want from there," Gallegos said.

But the education comes first, primarily so he can set an example to others that they, too, can do it.

STUDENT SPOTLIGHT

Adult Education students win awards



CCC Adult Education students gather at the Fourth Street campus to celebrate winning awards in a state competition.

Flagstaff, Ariz. — They come from all over the world - the United States, Mexico, Nepal, Saudi Arabia, Russia, Belarus, India, Venezuela, Peru, China, Ukraine, Thailand, Columbia and Kuwait.

But, now in Flagstaff, they are joined in the common cause of learning English through the Coconino Community College Adult Education program, and that will to learn has paid off.

Four of the students won awards from a statewide contest during Adult Literacy Week. And, on Thursday, March 9, CCC's Adult Education students showcased the submissions they made to the annual Arizona Adult Literacy Week Contest.

"It's an annual event celebrating adult literacy," said Debra Goldenstein,

CCC Adult Education English Language Instructor.

The contest featured adult learners statewide who were invited to participate and to create digital media-based projects (presentations, newsletters, essays or art) on a variety of topics that included: Advocating for a Better World, Advocating for Public Libraries, and Advocating for College and Career Readiness. Several students from CCC's English Language Acquisition for Adults classes submitted projects.

"There were a few I thought, 'Wow, these are really good,'" Goldenstein said. "It makes me excited and proud for them."

Four CCC students were selected out of entries from around the state to receive awards.

The award ceremony took place in Phoenix and was broadcast live at the Fourth Street Campus. After the award ceremony, students who participated in the contest presented their projects over lunch.

Winner Maria Hampton read her essay to the dozen students present. Her essay focused on keeping adversity from stopping people from pursuing their dreams. Hampton's dream is to get better at English, so she can go to college and take business courses. Her ultimate dream is to own her own business. She currently has a patent idea under review for a "Hands-Free Pet-Walking Device."

In her essay, she wrote: "Sometimes, circumstances or people will tell you, 'It is impossible,' 'You are not good enough for that,' 'You are too old,' 'You don't have the talent,' or 'the money,' etc. And that's not true. You have to sacrifice and work hard for it. Don't let your dreams die!"

She also wrote, "If I don't fight, no one else will. This has made me realize that you are never going to know your potential until you step out and take risks."

After each of the students made a presentation, often filled with emotion and gratitude to Goldenstein, the other students clapped, hugged and showed support to their classmates.

The mission of the CCC Adult Education program

is "to provide educational opportunities and support that improve the lives of our students and open doors to post-secondary education and careers." In adhering to that mission, Goldenstein said that she brought the idea for the contest to all her students. They discussed the concepts and the requirements for submission. Then, they picked a topic and picked a type of presentation. The students shared their ideas with the class, and they honed their ideas - with peer revisions and multiple edits - into solid projects they could submit to the contest.

Of her win, Hampton said, "It means a lot because hope is important. I feel that way and want to help others. I've learned from my failures. I think failure makes you be stronger. Just don't give up."

Co-sponsors and partners for the Arizona Adult Literacy Week Contest include Arizona Adult Education Service, Arizona Association for Lifelong Learning and Arizona State Library.

If you know of anybody who could benefit from the English classes offered at CCC, contact Goldenstein at 928-526-7622, or stop by classroom C2 at the Fourth Street campus. For more information about Adult Education at CCC, visit <https://www.coconino.edu/adult-education>.

'Little Johnnie' helps CCC students learn

Flagstaff, Ariz. — A new simulator mannequin has joined the Coconino Community College team to help students in the health professions get important hands-on training.

The mannequin, a pediatric version of Trauma HAL nicknamed "Little Johnnie," blinks his eyes, talks and even bleeds. Students can ask him questions to find out what ails him, just like any human. He joins his older counterpart, an adult simulator mannequin called Trauma HAL.

"Nursing, Emergency Medical Service, Fire, Paramedic and Certified Nursing Assistants, will all benefit from HAL and Little Johnnie," said Lori Edwards, CCC's Director of Nursing and Allied Health. "Even though we have HAL, the students need to learn about pediatrics as well. Children have different scenarios and lifesaving treatments than adults."

Just like Trauma HAL, Little Johnnie has lungs, organs, ribs and plumbing. He comes with a variety of "wound packages" for the students to learn from. Among them are broken bones, sores, burns and even amputations. Like HAL, Little Johnnie is equipped with computer technology that allows for wireless diagnostics and interaction between students and patient through a proctor-assisted process.

"Having Little Johnnie with HAL enables the EMS student in the field to treat both together," Edwards said. "Scenarios can be created to include traffic accidents, home accidents, or any trauma where a family may be together. Students will also have the ability to assess and treat in the lab prior to going to the clinical facility and working with real patients."

Trauma HAL, who made his debut last year, has been around town participating in a variety of training scenarios. He has also been instrumental in assessment training of the students. Little Johnnie is scheduled to be included in trainings in the next month.

"We are very happy to have Little Johnnie with us at CCC," Edwards said. "To have real-life simulation enhances the student learning and retention."

The purchase of Little Johnnie was nearly \$40,000. Funding for Little Johnnie came from the Northern Arizona Healthcare Foundation and the Capstone Health Fund through a grant from the Arizona Community Foundation of Flagstaff (Healthcare Fund). Additional funding came from a Perkins Grant from the U.S. Department of Education.

For more information about Fire Science, EMS, Nursing and all Allied Health programs, visit <https://www.coconino.edu/career-and-technical-education>.



CCC Director of Nursing and Allied Health Lori Edwards checks "Little Johnnie."

FOWLER From Page 1

this initiative."

Supervisor Fowler has also worked with the CCC Page Instructional Site Student Services Coordinator to promote success for potential and current students; helped secure funding for dual enrollment classes in Page; organized efforts across the Navajo Nation to keep the Page Instructional Site open; and has been a speaker at several CCC events in Page, including awards ceremonies.

"Supervisor Fowler has been a tireless advocate for higher education opportunities for students in Page and surrounding communities," said Lloyd Hammonds,

CCC District Governing Board Member. "Her efforts will help many students earn a college education and prepare for employment that will promote the economic vitality of our region."

When asked why post-secondary education and job training are important to Fowler as a public servant for Coconino County, she stated: "Post-secondary education and job training are critical to the economic foundation of our region. Our region is facing a major threat of catastrophic economic loss with the potential closure of the Navajo Generating Station and Peabody Kayenta Mine. In addition, our region has high poverty rates with unemployment. By establishing the Page Higher Education

Center, we are all working to provide a high-quality education and training to our county residents. Local training keeps local talent in the area, and this will help us reverse the 'brain drain' that troubles so many rural areas."

Fowler added that for Coconino County to be competitive, attract new business and grow existing industries, an educated workforce is imperative.

"This initiative is key to remaining a vibrant regional economy," Fowler said.

The CCC Distinguished Service Award recognizes outstanding service, leadership and support to the College and to the educational enrichment of Coconino County. Nominees must be residents of

Coconino County at the time of nomination, and they must have affected or substantially contributed a major accomplishment for the benefit of CCC and to the educational enrichment of district residents. The award is normally given to one recipient annually, and any resident of the county may nominate a person for the award. Current members of the CCC District Governing Board and individuals employed by the College are exempt from nomination.

The award will be presented during the CCC Foundation Annual Meeting, Alumni and Awards Breakfast, Friday, Sept. 8, 2017, at 7:30 to 9 a.m., at the CCC Lone Tree Campus, 2800 S. Lone Tree Road in Flagstaff.



Student speakers stress goals at 2017 Commencement



More than 120 students walked across the stage at CCC's 2017 Commencement on May 12.

Flagstaff, Ariz. — Work hard and prove the naysayers wrong.

Student speakers Kevin Scholler and Rita Schreiner challenged fellow graduates at Coconino Community College to pursue their goals and achieve their dreams during the 2017 Commencement Ceremony on May 12 at the Lone Tree Campus. More than 120 graduates took to the stage in front of a packed house of proud families and friends to receive their diplomas or certificates.

In all, more than 250 students were

awarded degrees and certificates from CCC.

CCC District Governing Board Chair Patricia Garcia offered the Pledge of Allegiance, and then Marion Sautter sang the National Anthem. President Colleen A. Smith, PhD, welcomed the new graduates, and Executive Vice President Jami Van Ess recognized student academic honors. Provost A. Dudley Gardner, PhD, recognized the CCC Faculty of the Year - Alan Petersen, Full-Time Faculty of the Year; and Andrew Allen, Part-Time

Faculty of the Year. K. Laurie Dickson, PhD, Northern Arizona University Vice Provost for Teaching, Learning Design and Assessment, offered remarks on behalf of NAU.

Scholler strolled confidently to the podium and told his story to the graduates and their families. He barely graduated high school, joined the U.S. Navy, and never planned on seeing a classroom again. His expectations for his life were low, and recovering from an addiction to alcohol, he found fate bringing him back to education's doorstep.

"A lot of my friends said I wouldn't last a month, and even a little voice in my head kept saying, 'You'll never make it,'" Scholler said. "All that doubt helped fuel a fire within me to prove them wrong. The doubt built a chip on my shoulder, and it made me want to show them that this was something I could do."

He enrolled at CCC, and, to his surprise, he did well. A member of the Phi Theta Kappa Honor Society, he graduated with a 3.9 grade point average.

"I leave you with this," Scholler said. "When they tell you you're not smart enough, prove them wrong. When they tell you you'll never be a successful student, prove them wrong. And when they tell you that you don't have what it takes to make an impact, and leave your mark on this

world, prove them wrong."

Schreiner talked about her role model -- the runner Wilma Rudolph, who hailed from her hometown. In 1956, Rudolph received a bronze medal in the Olympics, and she vowed to earn the right to run in the 1960 Olympics, which she did. Not only that, Rudolph won the gold medal.

"Miss Wilma taught me three very valuable lessons in her determination to be the best," Schreiner said. "First, community is necessary for success when striving for your goals ... Second, set a goal and work toward that goal until you achieve it ... Third, no excuses. You have no choice to do anything less than your absolute best."

Schreiner returned to school after a successful career, when her husband and children reminded her that attending college had been one of her life goals. Graduating with a degree from CCC is her version of the bronze medal, and she has earned the right to attend NAU for her shot at the gold.

"I am evidence that you are never too old or inexperienced for higher education," Schreiner said. "Once I graduate from NAU, I plan to write in earnest and tell my story. We all have a story to tell, and mine continues from CCC."

Page site honors student success



CCC Page Director Jim Hunter, right, celebrates with recent graduates during a Student Awards Ceremony on May 18.

Page, Ariz. — Page resident Mildred Williams wants to stick close to home after she gets her bachelor's degree in business from Dixie State University.

Her goal is to own her own bakery in her hometown, and her associate degree in General Studies of Arts from Coconino Community College was the start.

"I've done all of it here in Page," she said of her work to get her associate degree. "I enjoyed it because I was able to stay home with my parents and work, and because Page is so small, I know all the administrators and almost all the teachers here."

Williams was among a group of students recognized during a Student Awards Ceremony on May 18 at the Page Instructional Site. An intimate gathering of about 40 people congratulated the students on their accomplishments.

"It's important to recognize the achievements of our students and graduates here," said Jim Hunter, Director of CCC Page. "For many of our students and their families, it would be difficult for them to get to the ceremonies down in Flagstaff."

Nine students, including

Williams, were recognized for their successful completion of their studies at CCC by Biology Instructor Erin Lively and Math Instructor Robert Bullard. The two faculty members were also recognized as employees of the year for the Page site.

One student, Cheynae Curtis,

"Take that chance when life gives you opportunity. Even if you're scared, take it."

Deborah Boone
CCC Alum

The keynote speaker for the evening was Deborah Boone, Administrative Assistant to Coconino County Supervisor Lena Fowler. She shared her story about how, as a 16-year-old mother, she dropped out of school. At 25, she began GED classes at CCC Page. When she passed her GED test, she received three free credits at CCC.

"I took advantage of it," she said, and she began attending CCC. She applied for and received scholarships. She worked full-time. She went to school full-time. Her husband left her and her four children. "We made the best of it. I can remember my children growing up here."

She dedicated herself to putting in the work.

"I'm living proof you can do anything, anything," Boone said. "You just have to get up and start and not give up on yourself ... Take that chance when life gives you opportunity. Even if you're scared, take it."

And, now, she works for Supervisor Fowler.

"It comes back to here," Boone said. "It comes back to CCC."

CCC launches new website

Flagstaff, Ariz. — Coconino Community College unveiled a new website Monday, May 22, 2017.

For the past year and a half, members of a website development team worked diligently in the creation of a versatile, multi-platform website. CCC's former website was not capable of the versatility needed for establishing a contemporary image and informing and engaging the College's communities about the excellence in education offered at CCC.

Students, staff and faculty were given the opportunity to provide feedback on the new website prior to launch, and the website development team instituted a number of suggestions that improved the website experience.

"CCC's new website is a long time coming," said Andrew Lawlor, CCC's Chief Technology Officer. "The former website was approaching obsolescence, and the new generation of prospective students has been in search of a platform that would accommodate mobile devices. This new website accomplishes that goal, and it also offers a modern platform and professional look to match CCC's dedication to student success."

Coconino Community College's website can be viewed at www.coconino.edu. For a list of frequently asked questions, visit www.coconino.edu/new-website.

www.coconino.edu

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CCC CAVIAT students focus on health professions

Flagstaff, Ariz. — They're taking college classes, but they're still in high school.

Not only that, but they've proved their mettle in problem solving in the health occupations, and they went to a statewide competition in April.

Twelve students in Coconino Community College's Dual Enrollment/CAVIAT BIO 298 class, taught by CCC Science Faculty and Bridges to Baccalaureate Principal Investigator Aaron Tabor, PhD, took exams on Creative Problem Solving through Health Occupation Students of America (HOSA).

"Four of the students qualified to go to the state level," Tabor said, adding that all of the students are equally intelligent and deserving of accolades. The team placed ninth overall.

The four students, all 10th graders, are Cate Cole and Ethan Perelstein from Flagstaff Arts and Leadership Academy; and Kaleb Herrelko and Jacqueline Slack from Coconino High School.

According to information from HOSA, its mission is to "promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people."

The focus is on health science education and biomedical science programs to promote interest in pursuing careers in the health professions.

To prepare for the exams, Slack said that the team began by reading books on creative problem solving and by researching various health-related problems in the community. Cole added that the team tested one another with problems as well as timing the testing for solutions.

During testing, the team had 30 minutes to prepare and had 8 minutes to present their case in front of a panel to judge. They made the grade, and they're headed to Tucson for the statewide



CCC Science Faculty and Bridges to Baccalaureate Principal Investigator Aaron Tabor, PhD, heads the CAVIAT BIO 298 class at CCC.

competition.

"I personally am excited to meet other students like us, who are science minded," Perelstein said.

Herrelko added, "That could be fun."

Slack said, "I'm very excited to compete."

Cole said, "I'm really excited to see what we can come up with - real-world problems that affect millions across the globe."

The team members are part of the iCREATE High School Bioscience program. The class offers six credit hours from CCC to apply to a college degree. The students meet five days a week at the Center for Teaching and Learning at Northern Arizona University for lectures and labs.

The program is offered through the Coconino Association for Vocations, Industry and Technology (CAVIAT).

"I love coming here and getting a taste of what college and medical school will

offer," Cole said.

Perelstein said, "For me, this class is challenging, it's engaging, and that's what I really love."

Herrelko said, "I like the challenge and it requires more persistence."

Slack said, "I'm excited that every day after school, I get to be around science-oriented, like-minded people."

For Tabor, he said he thoroughly enjoys being the instructor for the class.

"Frankly, it's the students," he said. "I never in a thousand years anticipated teaching K-12 students at all, but this group of students is one of the best I've ever encountered."


Tabor added that his job is to educate the students on the translational sciences and the epidemiology field, but he also assists them with their professional growth - creating résumés, attending conferences, performing public speaking, seeking publication, and more.

As for the state competition in April,

Tabor said the students went and competed and had a strong showing. The students enjoyed themselves by stretching their abilities during the competition.

And as for the future, all four team members have plans. Cole's goal is to become a physician, an obstetrician. Perelstein is interested in mechanical engineering, particularly "biomimicry," or solving problems through evolutionary processes. Herrelko is still exploring, but he knows he wants to be an engineer of some sort. Slack is dedicated to becoming a neurosurgeon.

"We challenge one another and work to put our best foot forward as a team," Perelstein said.

The iCREATE HS Bioscience program is funded by a grant from the National Science Foundation. Community partners include CCC, CAVIAT, NAU, TGen North, North Country HealthCare, Coconino County Public Health Services District, and Flagstaff STEM City. 



CCC President Colleen A. Smith, PhD, center, informs county residents about a new educational cooperative among CCC, Diné College, Navajo Technical University and Northern Arizona University.

ECONOMY From Page 1

Arizona, the story is much the same. Arizona job growth is happening in Leisure and Hospitality, Construction, and Educational and Health Services.


John Stigmon, President and CEO of the Economic Collaborative of Northern Arizona (ECoNA), outlined a strategic economic development plan for the Page and northern Coconino County region.

Some known qualities when looking at the region: The closure of the Navajo Generating Station will have a dramatic economic impact on the region; the major industry in the region is tourism and employs a high percentage of residents; Navajo communities depend on Page for retail and other services; housing in the Page region is very limited and old; the workforce is transient because of tourism's seasonal nature; multiple cultures create unique demands on the workforce where cultural understanding is necessary for a successful workplace; and the workforce is in need of training.

According to Stigmon, the area has a number of strengths and weaknesses, and one of the opportunities to help strengthen the region's economy is education.

CCC President Colleen A. Smith, PhD, joined a panel discussion with members of Northern Diné College, Navajo Technical University and Northern Arizona University to discuss the development of a new initiative to use the CCC Page Instructional Site for a Higher Education Consortium Project. The HECP is being developed to help address workforce and economic development by providing collaborative, affordable and accessible higher education opportunities for residents in northern Coconino County. To that end, CCC has hired a new Director of Special Projects and Grants, Kay Leum, who will be working at the Page site to make the HECP a reality.

To conclude the meeting, Coconino County Supervisor Lena Fowler discussed next steps in strengthening the economic future of the region. Among the next steps to take are to schedule future meetings, continue work on the HECP, start working on communication infrastructure, improve service in the tourism industry and come up with a "brand" for the region.

"Up to this point, we have done a lot of things, but we have a lot of work to do," Fowler said. 

DNA From Page 1

The lab testing shows the students that the genetic modifications are present, but the testing does not determine whether or not they are harmful for consumption.

The hope is that the students will learn to apply the concepts of critical thinking they learn in order to understand what genetically modified organisms are.

"Most students arrive at class not even knowing what a GMO is," Baze says.

A GMO is an organism modified genetically by a human. DNA is transferred from a donor species into a target species in order to give that target species

a desirable trait, Baze says.

For instance, freeze-resistant tomatoes contain a gene from a fish that lives in Antarctica that lowers the freezing point of the fish's blood - a natural antifreeze.

The students have completed the first three labs, and Baze says she is happy with the results.

"It was successful," she says. "Most groups had some bands on the gels, which indicates the extraction, the amplification and the electrophoresis were successful. There are a lot of things that can go wrong in that sequence of labs, so it was nice to have some successes."


Ana Novak, the CCC Science Lab Coordinator says the thermal cycler was purchased along with a centrifuge and other lab equipment to enable students

to extract DNA, amplify it and study it for the presence of GMOs.

Baze adds that the College doesn't just have to use the thermal cycler for biology class.

"Since the college now owns the equipment, it might open up some possibilities for the other disciplines," Baze said.

For an example, Administration of Justice students studying forensics might benefit from the thermal cycler in the examination and amplification of DNA from crime scenes.

The thermal cycler and associated equipment was purchased for about \$6,300 from Science, Technology, Engineering and Mathematics funds to CCC from the state of Arizona. 

LEARNING From Page 1

in providing access," said NAU President Dr. Rita Cheng. "We've had great conversations, all of us, around specific programs that we are collaborating on. We have programs that can complement one another, and through a collaboration, make something that's not doable alone, very doable to reach students."

"It's not enough for us just to think about what we're trying to do here, but how can we try to scale this to different parts of the Navajo Nation," said Diné College President Dr. Charles "Monty" Roessel. "We need to address the aspirations of our students, the aspirations of our parents, the aspirations of our communities. We have to look forward."

"Since I've been with the university, our goal has always been to reach out to community members," said Navajo Technical University Chinle Instructional Site Director Arlena Benallie. "When classes are held locally, it gives the students the opportunity to be home with their families. We are happy to partner with all the other colleges."

Navajo Nation Vice President Jonathan Nez said, "It is very important that we begin to have a larger dialogue about higher educational institutions in this region."




Academic and government leaders from northern Coconino County gather for the signing of a cooperative agreement to enhance post-secondary education offerings to the region's residents.

He reminded the audience that the Navajo Generating Station's future is in question, and transitioning people into other, high-paying jobs will be important. Tourism is a big industry in the Page area and much of far northern Arizona, so encouraging the area's young people into that industry will require offering the tools they need to be successful in their career paths.

According to the Memorandum of Understanding (MOU), the participating institutions will work to deliver "collaborative, affordable and accessible higher education opportunities to the residents of northern Coconino County."

"More specifically, HECP

will enable the parties to develop pathways to promote access to higher education, allow for economies of scale not possible as autonomously functioning institutions, and increase the number of Coconino County residents who complete higher education programs and degrees," states the MOU.

The development of the HECP will happen in four phases spelled out in the MOU - initial discussion and planning; design and structure; implementation; and monitoring and measuring the success of the project. All parties will bear their own costs until implementation, when a more detailed cooperative arrangement will be made. 



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