

She's Got Game Natalie Diaz played point guard for four years in college. Today, she channels her energy into writing and teaching poetry at ASU, earning a MacArthur Fellowship along the way. Private support provides resources for her exceptional work. **6**


Trust is Earned Arizona State University and Virginia G. Piper Charitable Trust share a vision to improve lives in our Valley communities. **8**

Prepped Early-stage food business incubator helps caterers, food trucks scale up. **24**

Spring 2019
Issue No. 8

IMPACT

STORIES OF GENEROSITY AND OPPORTUNITY AT ARIZONA STATE UNIVERSITY



Wanted Qualified Teachers

ASU and its partners tackle an urgent need.

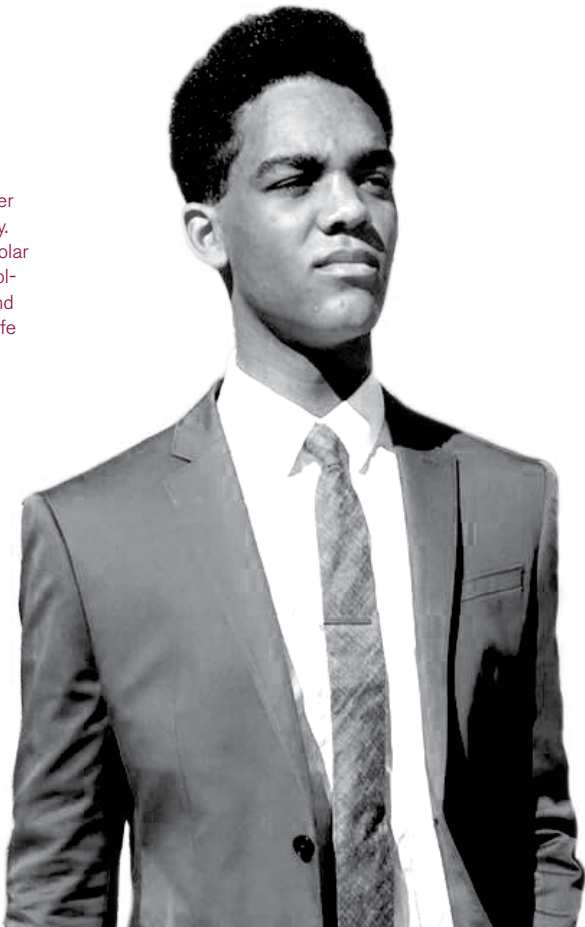


In Good Hands

Melissa Cody, artist in residence at the Heard Museum in Phoenix, weaves an intricate rug in a photo taken by Nicole Neri, a junior in the Walter Cronkite School of Journalism and Mass Communication. The photo is part of a collection for which Neri received the Greg Crowder Memorial Photojournalism Award, part of an endowment established by Troy and Betsy Crowder, of Arizona, to honor their son, Greg, a Cronkite alumnus and photojournalist who died in 2005.

FINDING STRENGTH Hillary Polk

“I look back at what I have been given and all that I have achieved, and quite frankly, it is impressive how much the professional and financial support from one family can make a difference in a student’s life.”



Hillary Polk's journey to higher education wasn't always easy. Today he is a T.W. Lewis Scholar studying neurobiology, physiology and behavior at ASU. Find out how he is preparing for life after graduation on page 18.

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CAMPAIGN **ASU** 2020



Student-teachers Wendy Wyatt, left, and Claire McHale team up to teach third grade.

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Solving Arizona's dire teacher shortage, one district at a time.

FEATURE

Good grades don't guarantee success in the workforce. Here's what helps.

PHOTO BY PHILAMER BATANGAN

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Our compliments to the chefs of Prepped, ASU's food business incubator.

ON THE COVER

Illustration by Keith Negley

GO GREEN ASU alumna and landscape architect Kristin Antkoviak (left), works with neighbor Veronika Volkova to “green up” the neighborhood at a community planting event.



Green Justice

PHOTO COURTESY OF KRISTIN ANTKOVIAK

“I think these native plants can give a healing aspect to the community.”

Kristin Antkoviak

When Kristin Antkoviak moved into a neighborhood of “tiny houses” in downtown Phoenix, she noticed there were no trees along the streets. ¶ She also noticed air quality was poor, and neighbors didn’t appear to be building a sense of community. ¶ At the time, Antkoviak was earning a master’s degree in landscape architecture at ASU’s Herberger Institute for Design and the Arts, where she was developing the idea that landscape design is one way to address social inequities found in poor neighborhoods. ¶ So Antkoviak set out to connect her neighbors with nature by organizing a day to plant trees. ¶ The event was so successful that they held a second one. Antkoviak went door to door asking residents what they would like to see in their community; they ultimately planted a pollinator garden and 10 kinds of native trees. ¶ Antkoviak believes these events foster neighborhood pride. “I think these native plants can give a healing aspect

to the community,” she told ASU Now, the university’s online news publication. ¶ However, her neighborhood isn’t all she hopes to change. ¶ Antkoviak envisions a new type of landscape architect, one who works directly with people in neighborhoods to help them understand native trees, water use and how natural spaces can help rectify environmental injustices. ¶ With the aid of scholarships from the Paul H. Klett, Gertrude Claypool, Earl and Ellen Davis and Katherine K. Herberger families, Antkoviak was able to devote time to her groundbreaking volunteer work. Due in part to those efforts, HIDA named Antkoviak an outstanding graduate student in 2018.

STUDENTS



Jaime Faulkner

How can we create safe spaces in which to discuss sensitive topics?

For recent graduate Jaime Faulkner, the answer lies in performance art, an art form she studied and cultivated at the Hugh Downs School of Human Communication.

Thanks to support from the Kristin Bervig Valentine Performance Studies Scholarship, Faulkner wrote and performed a solo show addressing issues of gender and pop culture.

She also helped organize the Encyclopedia Show AZ, a community-led variety show organized by students.



Stephanie Cahill

After suffering concussions playing youth volleyball, Stephanie Cahill was told by a doctor that brain trauma would make college impossible.

Now a senior double majoring in business law and psychology, Cahill proved that doctor wrong, using a variety of learning techniques to succeed.

With the help of a

scholarship from the National Society of Collegiate Scholars, Cahill focuses on social outreach, serving as president of Active Minds at ASU, which advocates for student mental health awareness. She also founded a mentoring program for underprivileged middle-school students.



Kevin Curwick

When hateful Twitter messages targeted students at a Minnesota high school, senior Kevin Curwick took action.

Curwick created an account for positive, affirming tweets. Ugly comments dwindled, and a new thread, “Nice it Forward,” trended worldwide.

Curwick’s capacity to lead earned him the JB Metzger Uncommon Leader Scholarship, established by the family of Metzger, ’02, who lost his life in a traffic accident. The scholarship supports future leaders in the health care profession.

Curwick earned a master’s in the science of health care delivery. Now a business intelligence analyst, he returns to the College of Health Solutions to share his knowledge of health care policy.

NARURO HASSAN
In-Depth Learning



How can people navigate religion and conflict? ¶ Naruro Hassan, a Somali refugee majoring in history at ASU, developed a nuanced understanding of this complex topic as an undergraduate research fellow in ASU’s Center for the Study of Religion and Conflict, where she worked with history professor Chouki El Hamel to understand nonviolent solutions to the censorship of women in Morocco. ¶ The program, funded by private support, provides undergraduates rich research opportunities, including the chance to work with professors and visiting scholars, and attend special lectures.



Zachary Holman

Touchscreens repelling fingerprints, bandages inhibiting infection – Assistant Professor Zachary Holman makes ordinary surfaces extraordinary using nanoparticles.

Nanoparticles are microscopic pieces of material that allow objects to take on dirt-repelling and antibacterial behaviors. However, to take advantage of those properties, manufacturers need a way to attach nanoparticles to objects.

Holman invented a tool that sprays nanoparticles onto surfaces, subsequently receiving an \$825,000 Moore Inventor Fellowship for the invention's potential from the Gordon and Betty Moore Foundation.



Kathleen Merrigan

Named one of the 100 Most Influential People in the World by Time magazine, Kathleen Merrigan spent decades developing agriculture policy in the U.S. She helped write the Organic Foods Production Act of 1990, which enacted standards for organic products, and served

JAMES ADAMS
Reducing Risk

After James Adams' daughter was diagnosed with autism, this President's Professor in the School for Engineering of Matter, Transport and Energy dedicated his career to helping individuals with autism and their families. ¶ Through research funded by Women and Philanthropy, donors who annually pool their gifts to benefit ASU, he developed a prenatal supplement that reduces the risk of pregnancy and birth complications, and of physical and neurological problems, including autism, in unborn children.



as U.S. Deputy Secretary for Agriculture.

Now a senior scientist at the Julie Ann Wrigley Global Institute of Sustainability, Merrigan is the first executive director of the Swette Center for Sustainable Food Systems, established through a gift from Kelly and Brian Swette, founders of Sweet Earth Natural Foods.

Merrigan is leading sustainable food systems degree programs that will help students "lead change in the policy environment."



Jewell Parker Rhodes

"Can't undo wrong.

Can only do our best to make things right," writes author Jewell Parker Rhodes in her best-selling novel, "Ghost Boys."

Through her characters, Rhodes, who holds the Virginia G. Piper Endowed Chair at ASU, unravels socio-political injustice, with police brutality and racial bias at the center of "Ghost Boys."

"Funding from the Piper chair ... allowed me to travel and research the murder of Emmett Till and its impact on the civil rights movement," says Rhodes, referring to the African American teenager lynched in Mississippi in 1955.

Learn about Virginia G. Piper Charitable Trust, which funded Parker Rhodes' chair, on page 8.

"Where we come from, we say language has an energy, and I feel that it is a very physical energy."

Natalie Diaz

ASU poet Natalie Diaz grew up in the Fort Mojave Indian Village near Needles, California, where she experienced an "incredible culture and communal love" that informs her work, which earned her a 2018 MacArthur Foundation Fellowship, informally known as the "genius grant." ¶ "The way I see everything, the way I see all of my art, was formed there on the reservation, listening to my great-grandmother's stories, hearing the language, talking with my elders ..." Diaz says in a MacArthur Fellow video. ¶ In the video, she speaks of a second influence that informs her poetry: the physicality and athleticism of being a collegiate basketball player at Old Dominion University, where she played point guard. "Where we come from, we say language has an energy, and I feel that it is a very physical energy. I believe in that exchange, and to me it's similar to what I did on a basketball court." ¶ Her ability and talent earned Diaz the Maxine and Jonathan Marshall Chair in Modern and Contemporary Poetry at ASU. Named for Maxine Besser Marshall and Jonathan Marshall, former newspaper publishers and Valley philanthropists, the endowment provides funds to support exceptional contemporary poets' research, travel and teaching.

Rising Voice

¶ Diaz, an associate professor in the Department of English, creates poetry that draws on her experiences as a Mojave American and a Latina woman to explore personal, cultural and political issues affecting indigenous Americans. The New York Times called her first collection, "When My Brother Was an Aztec," an "ambitious ... beautiful work."

PHOTO BY CYBELE KNOWLES



THE ASSIST The Maxine and Jonathan Marshall Chair in Modern and Contemporary Poetry provides funds to support Natalie Diaz's work at ASU.



Partners in Trust

In 2002, Virginia G. Piper Charitable Trust awarded its first grant to Arizona State University, a gift to ASU’s Infant Child Research Programs to support at-risk preschoolers.

The impact of that gift was “dramatic,” says Mary Jane Rynd, president and CEO of Piper Trust. The grant equipped educators to teach at-risk children in low-income schools.

The outcome would have delighted Virginia Piper, a Valley resident known for her quiet, steady generosity and a deep concern for people’s welfare.

Piper, widow of Motorola founder Paul V. Galvin and, later, Motorola Vice President Kenneth Piper, believed generosity to be her highest calling. An astute and engaged donor, she gave to causes she believed truly alleviated suffering.

Piper died in 1999, but left her trust to carry on her legacy.

That first gift to ASU from the Trust did more than yield results, Rynd says. It fueled a long, fruitful partnership between two organizations that share many core values.

Since 2002, Piper Trust has funded 19 projects at ASU for a total of nearly \$56 million. Projects include research in personalized medicine, programs that improve health care delivery, initiatives that increase engagement in the arts and more.

To honor the relationship, ASU named the Trust “ASU Philanthropist of the Year” in 2019.

Even before she established her trust, Virginia G. Piper directed her generosity to ASU. One example: the Paul V. Galvin Playhouse.

PHOTO BY CHARLIE LEIGHT

ILLUSTRATION COURTESY OF THE PIPER CENTER

Valley attorney and banker Jim Bruner remembers serving on ASU’s presidential search committee in 2002 and interviewing a candidate named Michael M. Crow. ¶ Crow was recuperating from an illness, but still managed to wow Bruner with his energy

Core Values

and vision. “We knew he would position ASU to be a real leader in the state in terms of getting things done,” he says. ¶ Bruner, who is also a trustee of Piper Trust, recognized a partnership in the making. ¶ Crow’s vision of a New American University – one that takes responsibility for the economic, cultural and social well-being of its community – aligned perfectly with Virginia Piper’s powerful sense of stewardship to the people of Arizona. ¶ Piper Trust focuses on causes to which Virginia Piper devoted her life’s generosity: education, the arts, healthcare and medical research, the diverse needs of children and older adults, and religious institutions. ¶ ASU is creating community-based programs that improve welfare in most of those areas, trustees say. ¶ “That fundamental responsibility for the economic and social welfare of the communities we serve really binds our two organizations,” says Sharon Harper, a trustee of both Piper Trust and ASU. ¶ ASU shares other important qualities, she says, including a commitment to strategic partnerships, agility and flexibility when solving problems, and the vision to embrace projects with long-term, transformational potential.

ASU’s historic President’s Cottage houses the Virginia G. Piper Center for Creative Writing, a fitting home seeing as Robert Frost visited there twice as the guest of ASU President Grady Gammage.

PIPER IMPACT ROUNDUP

The Written Word
One of Piper Trust’s first gifts to ASU elevated the profile and social impact of creative writing in the Southwest. Its gift to create the Virginia G. Piper Center for Creative Writing established a vibrant hub for writers. Since 2003, the center’s Distinguished Writers Series has brought writers of renown to work with faculty, students and aspiring authors throughout the community. Enrichment funds enable faculty and students to write, do research and share their talents in schools and community settings. Exchange programs and international partnerships extend their global reach.

Personal Diagnostics
The Piper Center for Personalized Diagnostics is at the forefront of studying biomarkers,

which indicate disease in the human body. Researchers are developing such innovations as a low-cost procedure that will allow clinicians to diagnose diseases like Type I diabetes and breast, ovarian and HPV-related cancers in as little as 10 minutes.

Health Care Delivery
A 2012 gift enabled ASU to begin a university wide effort to improve all aspects of health care delivery. One project equipped researchers to develop robotic devices that help people with motor impairments. Another funded ASU’s Obesity Solutions initiative, whose community-based programs include FitPHX Energy Zones, a free after-school fitness and nutrition program for middle school children. The award even established a school

devoted to improving public health models, the School for the Science of Health Care Delivery.

Resiliency
All communities experience stresses. Some are sudden, like floods or earthquakes. Some are long-term, like the housing collapse of the Great Recession. Piper Trust’s latest grant to ASU funded an initiative to make Maricopa County communities more resilient, so people can survive setbacks and resume their lives as quickly as possible. The Knowledge Exchange for Resilience brings together ASU researchers and community partners to collect data, identify vulnerabilities in a community, foster dialogue among decision-makers, and equip communities to prepare for and weather difficulties.



A Legacy of Discovery

When National Geographic wanted to write about Teotihuacán, the ruins of a once thriving city in central Mexico, it turned to Arizona State University Professor George Cowgill to explain its mysteries. For good reason.

Cowgill, an anthropologist and archaeologist, began his studies at Teotihuacán in 1964, when he joined famed researcher René Millon in systematically mapping the city, a feat considered a signature accomplishment of 20th-century archaeology.

He devoted his career to investigating an ancient city that holds as much fascination for modern researchers as it did for the Aztec people who first excavated its ruins in the 15th century.

Cowgill's research on the origins and col-

lapse of Teotihuacán helped set the archaeological agenda on these topics, which occupy the efforts of archaeologists today, says ASU archaeology Professor Michael E. Smith.

Cowgill, who passed away in 2018, developed a large database of surface artifacts, along with methods to determine their chronology and understand the city's spatial organization.

He co-founded the ASU Teotihuacán Research Laboratory on site, where ASU archaeologists, students and others have achieved numerous research breakthroughs, says Smith, who now directs the lab.

Following his death, the Cowgill family honored his dedication to research with a \$1 million gift to the lab, ensuring his work, and that of the larger scientific community, will continue.

Teotihuacán was highly organized, with sophisticated multi-family dwellings that housed 100,000 people. Trade, culture and art abounded. There is much to learn from this UNESCO World Heritage site.



PHOTO BY CATCHASAP (SHUTTERSTOCK)

PHOTO BY CHARLIE LEIGHT

In Sunnyslope, Arizona, families fleeing domestic violence find solace at Chrysalis, a nonprofit shelter. They live in transitional housing redesigned by Courtney Davis, an interior architecture student at ASU. ¶ Elsewhere in the Valley, students from ASU's School of Music teach middle school musicians to perform and interact with

Creativity Unbound

adults in senior care facilities.

¶ Design and arts students are able to collaborate in these community-based projects, thanks in part to the Dean's Creativity Council – civic leaders and arts advocates who support the vision of Steven Tepper, dean of the Herberger Institute for Design and the Arts. ¶ That vision, says Tepper, is to liberate artists and designers from the restricted roles society has carved for them. ¶ “For 150 years, we have placed arts and culture in special places – concert halls, museums, galleries, theaters; and we have thought of art and design as ‘extras,’” Tepper says. ¶ They have the capacity to be much more. ¶ “The goal is to place students in fields outside of the traditional design and arts areas so they can leverage their creative skills,” says Molly DeFilippis, who, as a Dean's Creativity Council member provides feedback, recommendations and support. ¶ “Many design and arts graduates from all universities end up working outside of the arts at some point during their career. HIDA wants to ensure that it prepares these students for their future as much as possible,” she says.

The new bronze pitchfork statue at Sun Devil Stadium is a symbol of school spirit and the perfect place for fan photos.



IMPACT ROUNDUP

'Forks Up

Going to an ASU football game? Make sure to get your photo in front of the pitchfork!

Thanks to ASU supporter and alumnus Arthur Pearce II, ASU finally has a statue of the iconic symbol on campus. The 6-foot-3-inch bronze 'fork anchors the southeast entrance of Sun Devil Stadium, the perfect place for fan photos.

Artist and fellow alumna Jeff Carol Davenport created the statue at her foundry in Tempe.

A Maverick's Story

Arizona Sen. John McCain, who died in August 2018, donated his papers to ASU, providing a

rich archive of political material reflecting his 35-year career as a U.S. representative, senator and two-time presidential candidate.

The ASU Library will ultimately house more than 1,000 boxes of McCain's schedules, notes, letters, files, photos and memorabilia, which archivists will curate and make available to the public. For permission to access the collection, submit a request via the library website's Ask an Archivist.

Student Power

When it's hot, we enjoy air conditioning and chilled beverages. Tobin Meyers spends his time considering how energy

infrastructures keep up with this demand.

Meyers is one of eight students in the Ira A. Fulton Schools of Engineering to win a Power and Energy Scholarship from the Institute of Electrical and Electronics Engineers, the world's largest technical professional organization. In the past seven years, more of these scholarships have gone to ASU students than to students at any other university.

Meyers interned at Arizona Public Service, where he learned utility operations and energy management technologies; at ASU, his graduate work focuses on making efficient power converters.

Food Network

In one month alone, ASU students, working with Arizona-based Borderlands Produce Rescue, diverted 20,261 pounds of fresh produce from landfills, feeding 1,452 people. Students donated their time and talent through Changemaker Central @ ASU, a multi-faceted program that provides students passionate about social justice with resources to enact change. Private support – including funding and mentorship – enhance several of Changemaker Central's activities.



ILLUSTRATION BY KEITH NEGLEY

WANTED

QUALIFIED TEACHERS

By **Erik Ketcherside**
Photographs by **Philamer Batangan**

ASU and an Arizona school district tackle an urgent need

In 1891, Karl Elsener invented a folding pocket knife for soldiers. His client, the Swiss army, had stipulated that their new knife should enable troops in the field to disassemble their rifles and open cans of food. And also cut things.

In the century and a quarter Elsener's company, Victorinox, has been producing the "Swiss Army Knife," deluxe models grew to include wood saws, fish scalers, magnifying lenses, hoof cleaners, chisels, toothpicks, pens and digital clocks. Not yet available is a built-in sewing kit to repair overloaded pants pockets.

But what works for tools doesn't work for schools. And by packing too many functions into too small a package, schools, too, are coming apart at the seams.

The education equivalent of the Swiss Army Knife is today's teacher, enlisted to be not only an expert in content

and in classroom management, but also assessment, individualized instructional strategies and learner differences, developmental psychology and cultural context.

Carole Basile calls this model "the widget teacher." And as dean of Arizona State University's Mary Lou Fulton Teachers College, one of the most prolific producers of teachers in the U.S., Basile says, "The job of a teacher who is asked to be all things to all people at all times is untenable." The results, she says, are not in the best interest of kids, of teachers and of the education profession — already under stress from a nationwide teacher shortage.

Basile and her workforce development team have some ideas for managing the widgets; research-based, innovative ideas. And they've teamed up with some equally innovative partners in an initiative to reinvent the education workforce.

Christy Burton

... is one of those innovative partners. She chairs the Burton Family Foundation. And she found a kindred spirit in Basile.

"Our foundation, first and foremost, invests in leaders," Burton says. "I met Carole at an ASU Foundation event and was impressed with her vision for rethinking the way the teachers college delivers education. She was willing to work with the community. I emphasize the community part, because I think sometimes that gets lost in the discussion about schools and what really makes a school rich."

Burton says a deep appreciation for community means, "We're a bit different from other foundations." She and her husband, Daryl, created the foundation with profits from their family business. Presson Companies has a mix of industrial and office real estate holdings. "What formed the foundation was our decision to sell off quite a few of our office properties and focus predominantly on industrial properties," she says. "But we have properties in the Avondale area we plan to hold on to, and that gave me a look into the community and let me be familiar with what's going on there."

In Avondale, Burton had a passion, Basile identified an opportunity, and both found another innovative partner.

Avondale Elementary School District

... is one of two such districts serving the city of Avondale, a bedroom suburb of Phoenix that's home to about 80,000. Avondale Elementary School District comprises one middle school, grades 6 – 8; four K – 8 schools; one K – 1; one 2 – 5; and an alternative placement school for students with emotional disabilities.

Overseeing them all is Betsy Hargrove (EdD, '06), Avondale ESD superintendent since 2012. In 2017,

Hargrove approached Mary Lou Fulton Teachers College for help with a challenge that confronts nearly every public-school superintendent: how to encourage families to enroll their children in their districts. Hargrove had heard that MLFTC offers a design thinking initiative that would enlist the district's faculty and staff, as well as community members, to act as thought partners in addressing the challenge.

The college describes its design labs as "intentional, collaborative, open-ended design processes that value local context, diverse perspectives and iterative testing of solutions." MLFTC facilitators guide teams of stakeholders in a process that identifies complex challenges in education and develops prototype solutions.

That's what Betsy Hargrove wanted. And that's what Christy Burton could get behind. She had heard about the design labs from Carole Basile and saw the potential. "It wasn't happening just at the university level," Burton says. The design labs engage with people throughout a school district and beyond, "going right into the community."

The Burton Family Foundation funded the Avondale Community Design Lab with \$50,000. From October 2017 to February 2018, MLFTC personnel facilitated a series of workshops in Avondale ESD. Each of the district's 10 schools and the district office sent teams comprising administrators and principals, teachers and staff, students, parents and community members. Their challenge: "How might each of the district's schools design a unique identity for themselves?"

Using design thinking, the teams arrived at some ideas for retooling the schools. Hargrove says, "As each session went by, you could see how people engaged differently and left with an idea." Christy Burton took part in the process, and she and her son were present at the district-wide final presentation. "As Christy said, we didn't know what the end result would be," says Hargrove, "but the ability to engage over an entire year with a large group of people from all of our sites was really the gift behind all of this."

In the end, the workshops also identified a larger challenge: The district's schools should perhaps be focusing on delivering a different, better experience to their students. Their most pressing problem might not be marketing, but product.

Betsy Hargrove

... already knew one way to improve her schools: better teachers and more of them.

"In Arizona over the past several years we've had great difficulty being able to



Wendy Wyatt conducts a lesson for third graders. Copper Trails School in Avondale, Arizona pays Wyatt and her co-teachers for student-teaching.



Claire McHale is one of three student teachers who, together, fill the role of a certified teacher.

find a certified teacher to be in each of our classrooms," Hargrove says, but that doesn't mean there aren't people who want the spots. An August 2018 investigative report by The Arizona Republic stated, "Since the 2015–16 school year, nearly 7,200 teaching certificates have been issued to teachers who aren't fully trained to lead a classroom" — an increase of 400 percent in only three years.

Robert Morse, MLFTC's co-director of professional experiences, explains: "In Arizona, if you have a high school diploma or GED, you can go to the Department of Education and get your emergency substitute certificate. And some districts are in such high need to fill positions that they will have that person as the teacher of record in the classroom," Morse says, "so someone with a high school diploma is doing the job of a certified professional teacher." In Avondale ESD last year, 12 percent of the classroom teachers had only emergency certification. Another 25 percent were certified, but not for the subject areas they were teaching.

Based on the design lab experience, Hargrove decided to enlist the teachers college in addressing another challenge she and her principals deal with every year: how to

fully staff their classrooms with qualified teachers when there aren't enough in the state to go around.

Robert Morse

... is confronted with that challenge every day. He works the supply side to try to meet schools' demand. As executive director of professional experiences, Morse manages everything related to internship and student teaching programs to ensure that MLFTC graduates are fully prepared to enter the education workforce. By the time a newly minted teacher graduates, they've been through a junior year, part-time internship, and a senior year residency of full-time teaching under the wing of a highly qualified mentor teacher. With more than 3,000 educators graduating from MLFTC every year, that's a lot of experience. And experienced educators are what Avondale ESD desperately wants.

Morse is part of MLFTC's division of teacher preparation, which is putting into action Carole Basile's vision for developing and deploying a 21st-century education workforce. The college's mission statement, adopted when

Copper Trails Principal Stacy Ellis, center, oversees efforts to prepare teacher candidates for the classroom. She checks in with Elisa Samano, left, and Kaitlynn Paul.



Basile took the reins in 2016, says MLFTC will “work with schools and community partners to design and deploy teams of professional educators that will provide the full range of expertise and personalized learning support that students need and deserve.” So if the workforce should be made of teams, not widgets, why not start deploying the teams before they’ve graduated?

Hargrove was ready. Morse says, “We reached out to several districts with the idea of placing students in our student-teaching experience in a collaborative team model, and Betsy was the first to respond.”

The new model moves away from assigning student teachers — what the college calls teacher candidates — to a one-mentor, one-TC placement. “In Avondale,” Morse says, “we have three teacher candidates placed with a lead mentor teacher who is one of the district’s certified teachers.”

“Let’s say that lead teacher teaches second grade,” Morse says, “and that grade level consists of four classrooms, but one of those classrooms needs a certified teacher. In this model, there are three teacher candidates assigned to that lead mentor teacher, and they are respon-

sible for two classrooms, so you have four adults working with 50 to 60 students.”

Morse says the idea is that the lead mentor teacher is constantly planning with and co-teaching with the TCs, looking at ways to regroup the 60 students to optimally use the expertise in the room. “Those three teacher candidates and the lead teacher are free to move between the two rooms,” Morse says, “to maximize the time each student gets with the four adults.”

Stacy Ellis

... sees the results of this new approach, and the challenges, firsthand. She’s in her sixth year as principal of Copper Trails School, the Avondale K – 8 piloting the team-teaching model. And she admits, the challenges have been many.

“It was definitely a pilot program being built and redesigned as we were going forward,” Ellis says. “We had to balance the needs of the candidates who are here to finish their education with student learning. For example,

we needed to provide the teacher candidates with more planning time for them to observe their lead teacher actually teaching, because the first day of school was their first day, too.”

A huge advantage of the new model was that Ellis wasn’t just accepting student-teacher placements. “We interviewed all of these candidates,” she says, “so we were able to place them in a way that would have a positive impact on student learning.”

The candidates had to be interviewed because they had to apply. And they had to apply because they were going to be employees of Avondale ESD, working with certificates as long-term substitutes. That’s the second trailblazing aspect of the model: These student teachers are being paid to teach.

It’s not much, everyone admits; more of a stipend than a salary. But the team of three teacher candidates is filling the role of a certified teacher, so the district divides the salary set aside for that spot among the three teacher candidates on the team.

Betsy Hargrove says that was always part of her plan. She tells a story of stopping at The Home Depot after work a few years ago and being recognized by the young man at the register. “He said, ‘Aren’t you Dr. Hargrove?’ ‘Yes, I am. Aren’t you one of our student teachers?’ ‘Yes,’ he said. ‘I’m over at Wildflower School. Can I tell you what I’m going to be teaching tomorrow? I’m working here till 10 tonight, but then I’m going home and studying my lesson plan because I really want to be prepared.’”

“I thought, hold on a second,” Hargrove says. “We have this young man who’s student teaching all day long, who’s working incredibly hard with our children, who has to work after school from four until 10 o’clock at night, and then go home and do his lesson plans so he’s ready to be his absolute best for our kids.

“That’s when I wondered, how can we provide an opportunity for our student teachers to be compensated for the work they’re doing so they can focus all of their efforts on what happens in our classrooms, rather than having to go out and support their families in a different way.”

Carole Basile

... has been outspoken about the need — particularly in Arizona — for a 21st-century education workforce. “Too often, schools have to focus only on addressing immediate, palliative needs,” Basile says. “With the support of the Burton Family Foundation, we’ve been able to partner with



Christine Tamayo works one-on-one with a student while her co-teachers attend to the rest of the class.

the Avondale district in a way that addresses long-term systemic issues. This work represents a significant step toward designing learning environments in which we surround learners with teams of professional educators who can deliver personalized learning.”

And Basile emphasizes that the concept being explored in Avondale is team teaching, not team teacher training. “No teacher — whether a student teacher or a 10-year veteran — should be on an island,” Basile says. “Our pilot work in Avondale has drawn attention from a number of other districts because it has the potential to be better for both students and teachers. Ultimately, this is about developing a more sustainable educator workforce that can deliver better outcomes to learners and more rewarding careers to educators.”

Christy Burton

... says she’s excited to follow the success of the Avondale pilot, but she expects other, long-lasting benefits from the design labs her foundation made possible.

“There is a much deeper and richer experience that grew out of the vision of having these workshops of collected educators,” Burton says, “and when I say educators, I mean everyone who is involved in the education of students. That can be a coach, that can be somebody from a community organization that provides after-school tutoring groups; all those folks that are impacting the growth and development of students. I see the potential to take this model into other areas, and that’s something philanthropy can help with.

“These proof-of-concept projects, if they work, become the model for other schools or districts that are willing to think differently.”



ILLUSTRATION BY DAN PAGE

Find Your Strengths

Your Passion Will Follow

By Stephen Des Georges

In a home split asunder by divorce, faucets run dry and the lights go dark because of unpaid bills. This was Hillary Polk's reality growing up.

When he was 11 years old, Polk's family lived in a Phoenix homeless shelter for four months while his parents litigated the divorce. Polk recalls sitting in that shelter, his thoughts obsessively returning to one thing: "I hope this doesn't interfere with school."

"Imagine a boy who went to school every day and absolutely loved learning but was worried one day he would have to stop learning," he says.

Polk left the shelter to live with his mother in Tempe. His drive to learn carried him through high school, ultimately earning him scholarships to Arizona State University's Barrett, The Honors College for studies in neurobiology, physiology and behavior.

For Polk, succeeding at academics was never an issue. He'd been doing that for as long as he could remember, even as turmoil roiled his family.

What he didn't have, and what he knew he needed, were skills to succeed in the workforce. Self-awareness. Direction. Career planning. Leadership.

"There were no doctors in my life," Polk says. "There were no engineers. I didn't have a lot of examples of successful people to show me how to begin a career."

Yet today he is unwavering in his desire to be a cardiothoracic surgeon and is excited to apply to medical school after he graduates in 2020, aspirations he attributes in part to his T.W. Lewis Scholarship.

The scholarship was established by Jan and Tom Lewis. Tom is founder, owner and CEO of the T.W. Lewis Company, an Arizona-based luxury homebuilder and diversified real estate investment company.

They created the scholarship in 2001 to provide students from Maricopa County not only financial support, but also personal development through career coaching, self-awareness assessments, leadership training and networking opportunities. In 2014, they decided to direct that scholarship support exclusively to Barrett students.

For Polk, the self-assessment and career counseling have been invaluable. "The coaching helped me realize what I truly value," he says. He meets every semester with Juan Kingsbury, founder of Career Blindspot, a company that specializes in matching people's talents to careers. Together, they revisit Polk's assessment and clarify his goals.

Tom Lewis says Polk's story is a testament to the vital importance of understanding and developing individual strengths to prepare students for professional careers.

"It's not about finding 'passion,'" Lewis says. "My passion was basketball, but I couldn't dribble with my left hand, so I had to switch gears." As a young man, he pursued engineering, but later discovered an aptitude for business. "Awake" and "excited," Lewis followed his strengths to success as a homebuilder, entrepreneur and philanthropist.

This year, the Lewises decided to go beyond their scholarship and expand the opportunities it provides to all students in Barrett.

They gave a gift to establish the T.W. Lewis Center for Personal Development on ASU's Tempe campus, a one-stop shop where students can go for assistance with the kind of personal development offered by the scholarship, as well as courses on finding success and happiness. The Lewises also contributed to the construction of the Barrett Honors College Student Success Center, which will provide services like career counseling, alumni networking, national scholarship advisement and other programming.

"There's a lot of current knowledge about career planning, personal strengths, success and happiness," Lewis says. "There's the idea that you follow your passion and everything will be fine. I think you need to find your strengths, and your passion will follow. Every student is unique, and we can help each one realize their strengths and better understand how to find success and happiness."

As he looks toward graduation, Polk sometimes thinks of his 11-year-old self and the months he spent in a homeless shelter. He regularly goes to the very same shelter to volunteer, reading to children.

"I look back at what I have been given and all that I have achieved," Polk says, "and quite frankly, it is impressive how much the professional and financial support from one family can make a difference in a student's life."

"THE COACHING HELPED ME REALIZE WHAT I TRULY VALUE."

—Hillary Polk

GOAL KEEPER Steve Adams uses soccer as a way to teach athletic and life skills to refugee children.

Give and Go

Steve Adams has a 3-year-old daughter and a 2-year-old son, who “watch everything that I do.” ¶ A former collegiate soccer player who trained on the Olympic development team, Adams earned an ASU MBA in 2005 and now develops real estate for Adams

Craig Acquisitions. ¶ Combining his two talents – soccer and finance – allowed him to teach his children a valuable life lesson. ¶ “I want to show my kids that individuals can make a difference if they use their gifts in life to help others who are less fortunate,” Adams says. ¶ After he sprained an ankle playing in a recreational league tournament, he used the downtime to volunteer-coach for North Phoenix Christian Soccer Club and ultimately form Valley-based God Loves Soccer FC, a program for refugee children whose families can’t afford club soccer. The organization’s mission is to teach responsibility and perseverance through sports and faith. ¶ Adams and his wife, Cynthia, who also earned an ASU MBA, realized they wanted to continue helping refugee children. The family established a scholarship in the W. P. Carey School of Business that gives first preference to an undergraduate of refugee status, with second preference to a first-generation student. ¶ “Phoenix is one of the largest refugee outlets in the United States, and we can’t think of a better way to support ASU, Phoenix and our nation than giving children and families from war-torn countries the gift of the American dream through education,” Adams says.

“I want to show my kids that individuals can make a difference if they use their gifts in life to help others who are less fortunate.”

Steve Adams

PHOTO BY PHILAMER BATANGAN

DONORS



Lionel E. Rombach

As president and CEO of Special Olympics Arizona, Jamie Heckerman oversees programs that empower people with disabilities to experience the joy of sports.

Heckerman ('09) earned a degree in therapeutic recreation, attending ASU on the Lionel E. Rombach Scholarship.

Rombach, a civil servant in the Pima County probation department, lived a simple life so that he could give away as much money as possible. “He owned few possessions, got as much wear as he could out of his clothing and ate a sparse diet...,” wrote the Arizona Daily Star upon his death in 2008. He gave so generously, the IRS audited him after his giving exceeded 50 percent of his income.



Marshall Parke

Now in its 10th year, the Thunderbird SHARE Fellowship offers promising talent from developing countries the opportunity to take control of their future – and the future of their home regions – through a full

MATT CONSALVO
Planning Ahead



A gift from the Arizona Regional Multiple Listing Service equips students in Barrett, The Honors College to pursue scholarly work in urban planning and fields focusing on the future of real estate. The ARMLS, which aggregates data on properties for sale or lease, will fund an honors scholarship, says Matt Consalvo, its CEO. It will also help students with real estate-related research.

scholarship to ASU’s Thunderbird School of Global Management.

The fellowship has funded 59 scholarships for students from 30 countries, from Afghanistan to Zimbabwe.

The inspiration for the program began with Marshall Parke ('77), who works in private equity and investing and whose career took him to myriad emerging markets. Parke realized that earning a degree is half the battle for students from those countries. He founded the alumni-supported fellowship to include access to strong networks and professional mentoring.

Fungai Madaza ('17) from Zimbabwe summarized her experience with SHARE: “In Africa, we have a famous proverb: ‘It takes a village to raise a child.’ SHARE has been my village.”



Deborah Carstens

When ASU supporter Deborah Carstens learned that the GI Bill places a cap on benefits, precluding some U.S. veterans from pursuing a law degree, she wanted to help.

Carstens, whose late husband, Bill, was a lawyer and ex-Marine, funded a scholarship program that offers up to four full-ride scholarships, with two reserved for Marine Corps veterans and two for veterans of special operations forces.

Former Marines Christopher Senn and Conner Pursell, who is in the Reserves, received the first awards to attend ASU’s Sandra Day O’Connor College of Law.



The Thunderbirds

Sun Devil golfers practice at a new, state-of-the-art facility at Papago Golf Course, thanks to support provided by The Thunderbirds, a volunteer events and charitable organization active in the Valley since 1937.

The group was part of a partnership that includes the Arizona Golf Community Foundation, the city of Phoenix, and Phil Mickelson Design. Mickelson, an alumnus and five-time PGA Major Championship winner, designed the complex. He and his wife, Amy, also contributed to the project.

The Thunderbirds Golf Complex spans 12 acres and includes premier practice spaces for every kind of golf shot.



Markham Contracting

SpaceX founder Elon Musk envisions building a futuristic transportation system called a hyperloop – passenger pods that zoom through miles of tubing at hundreds of miles an hour.

When Musk challenged teams

to create pods for a competition last summer, an ASU-led team, AZLoop, placed among the top eight.

To gain an edge in the competition, AZLoop partnered with Markham Contracting Co., Inc., to build an open-air test track on ASU's Polytechnic campus. Markham Contracting, a general engineering firm founded by ASU alumnus Mike Markham in 1977, provided the labor for the track; ASU provided the venue.

Markham has a long history with ASU's Del E. Webb School of Construction, serving on the school's Construction Industry

Advisory Board and investing in the College Avenue Commons, scholarships, a professorship and more.



U.S. Army

A partnership between the office of Distinguished Graduate Fellowships and the U.S. Army Department of Military Science at ASU will fund a master's degree in any field for students who commit to serve as an officer after graduation in the Army, National Guard or Army Reserve.

SI SE PUEDE Making Waves

An all-female underwater robotics team at the ASU Polytechnic campus is building a self-driving submarine for an international competition, prototyping technology that can detect underwater bombs, survey wreckage and more. Desert WAVE (Women in Autonomous Vehicle Engineering) is a partnership with the Si Se Puede Foundation, which encourages learning through robotics clubs. Si Se Puede also takes part in ASU Latino Partnership Scholars, which awards scholarships to students in the science, technology, engineering and math fields. Since only 13 percent of working engineers are women, Desert WAVE provides an opportunity for more women to excel in this field.



“The communities and the resettlement agencies have struggled to address the health care gap.”

Clinton Reiswig

More than 62,000 refugees from 109 countries have made Arizona their home, roughly 80 percent of whom resettled in Maricopa County. Many do not have the resources for, or have never received, proper health care. ¶ Two student-led programs in ASU's Office of Global Social Work – the Refugee Education and Clinic Team (R.E.A.C.T.) and Smiling Eyes – are providing services to remedy this lack of health care and improve the well-being of refugees in Maricopa County. ¶ “The communities and the resettlement agencies have struggled to address the health care gap,” says Smiling Eyes team member Clinton Reiswig. ¶ But community partners and ASU students, working through the Office of Global Social Work, accepted the challenge. ¶ Smiling Eyes, a dental clinic, runs solely on the generosity of community leaders, resettlement agencies, dentists, dental hygienists and students donating time and expertise to provide oral care for 100 refugee clients monthly. ¶ In collaboration with Refugees and Immigrants Community for Empowerment, a support network, and Arizona Healthcare Outreach, Smiling Eyes creates a sense of community among refugees in Maricopa County while improving their overall health. ¶ With Smiling Eyes addressing oral health care, R.E.A.C.T. bridges the health care education gap. ¶ Gathering Humanity, a refugee resettlement agency in the Phoenix area, along with other nonprofits

Filling a Void

and medical providers, lends its expertise and resources to facilitate R.E.A.C.T.'s workshops and books informing refugees of basic hygiene practices, including handwashing and exercise. R.E.A.C.T. is strengthening bonds with the local refugee community and nonprofits in the hopes of opening a free, student-run clinic.

PHOTO BY CHARLIE LEIGHT



SUPPORT NETWORK Biomedical sciences undergrad Julia Lorence (left), psychology undergrad Katherine David and Gathering Humanity volunteer McKinlie Jones (right), collect items for refugee families.

Prepped and Ready

Prepped — a free, early-stage food business incubator at ASU designed for ventures owned by women and underrepresented minorities — has helped dozens of local businesses scale up their food ventures in the community.

Thanks to donors who wish to remain anonymous, it has the funding and staffing it needs, and accepted its sixth cohort this year.



Impact

Prepped works to support small businesses owned and operated by women and underrepresented people. Since 2016, the fifth cohort has served

19

entrepreneurs, representing

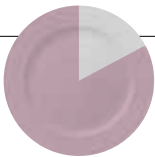
12

businesses, bringing total Prepped impact to

63

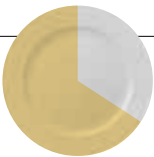
businesses served.

The goal is to give women and minorities access to business knowledge so they can take their food trucks, catering businesses and other small-scale companies to the next level.



83%

of participants were entrepreneurs of color; all but two participants were female.



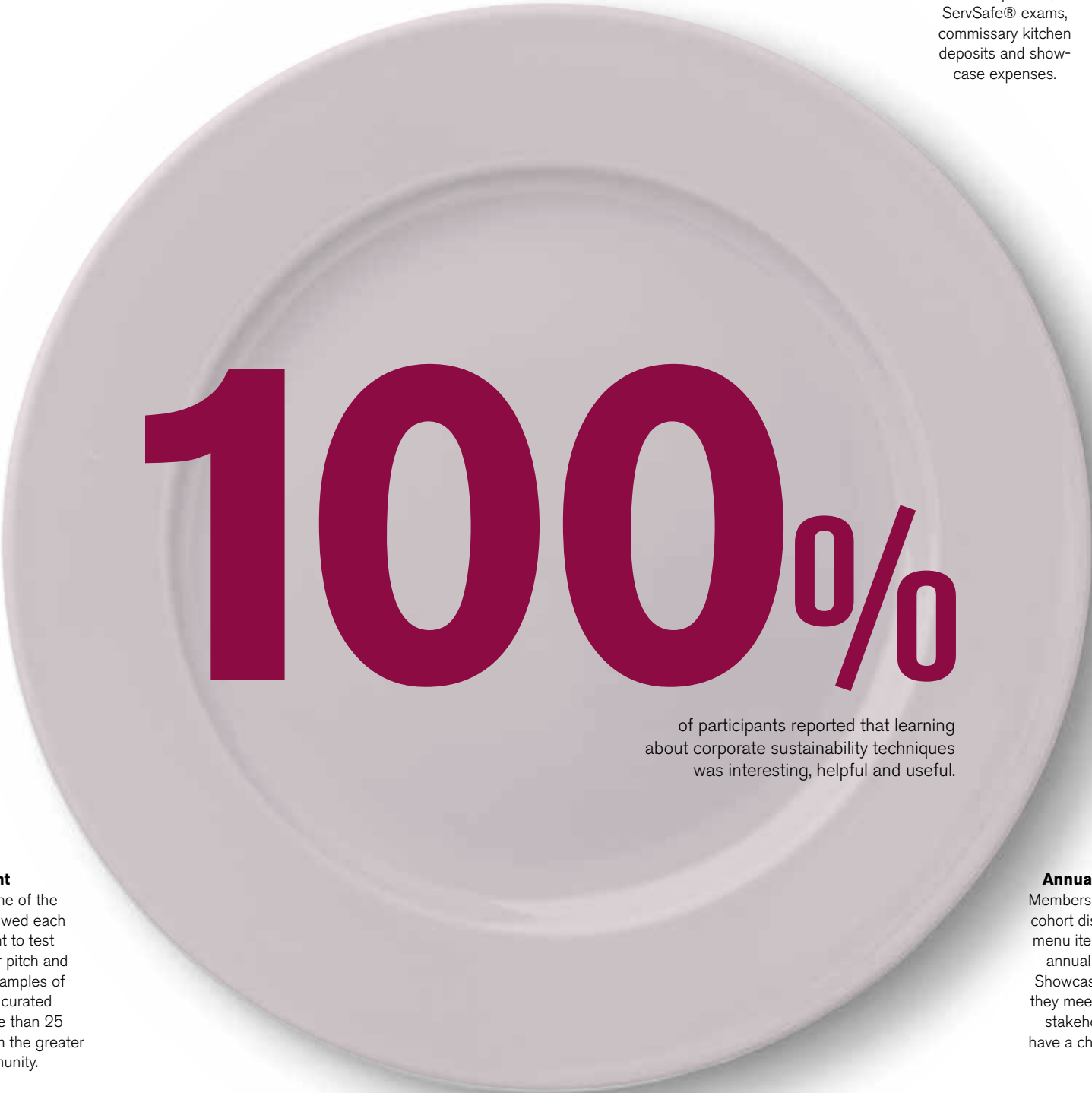
66%

of businesses took advantage of the financial support reimbursement program. This support includes health permits, ServSafe® exams, commissary kitchen deposits and show-case expenses.



5%

reported implementing a financial system for the first time, while the same percent of participants disclosed they learned how to calculate food costs for the first time as well.



of participants reported that learning about corporate sustainability techniques was interesting, helpful and useful.



Mentor Night

The capstone of the cohort allowed each participant to test his or her pitch and provide samples of food to a curated list of more than 25 experts from the greater Phoenix community.



Annual Showcase

Members of the fifth cohort display their menu items at the annual Prepped Showcase, where they meet industry stakeholders and have a chance to win up to \$5,000.

Spotlight



Maria Parra Cano

Age: 37

- ▶ I am a mother of four and the owner and manager of Sana Sana, a food truck that caters to community events.
- ▶ At Sana Sana, we focus on creating 100 percent plant-based Mexican food such as red chili bowls, posole and tamales.
- ▶ We use ancestral foods that are low glycemic, gluten free and vegan to begin healing our community from diseases like diabetes and hypertension. Community co-ops and sovereign nations provide our indigenous ingredients, which helps us ensure they are locally and ethically sourced.
- ▶ In the future, I hope to have a brick-and-mortar store and to spend more time focusing on the education piece of Sana Sana.
- ▶ We are learning the dynamics of having a mobile food business, and the Prepped team made the experience unique. They obviously wanted to see participants succeed. I enjoyed knowing that my colleagues in Prepped had similar struggles and were looking for a support base.
- ▶ My biggest takeaway from Prepped is having a food tribe to connect to, as well as using my skills to help others. I would advise all participants to work on building relationships with others.

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