

HAVE YOU THOUGHT ABOUT...CODING?

Grand Canyon University and Science Foundation AZ Promoting Computer Science for All Students in Arizona

In the state of Arizona, when asked, 90% of parents said that they want their child's school to teach computer science. Even teachers, 56% percent of them in fact, believe computer science should be required in schools. Unfortunately, only one in four schools in the state teach it. (2015 Gallop Poll-Google).

Grand Canyon University and Science Foundation AZ (SFAz) have decided it is time to change that number.

GCU and SFAz have been recognized by Code.org as Arizona's Professional Learning Partner joining forces to bring computer science to every school and every student, especially women and underrepresented students of color.

For elementary schools in the greater Phoenix area, GCU provides FREE high-quality one-day Computer Science Fundamentals Workshops for Elementary teachers throughout the year. This workshop will prepare teachers to introduce computer science basics in their classes and/or in school STEM-related programs. The format is fun, accessible and relevant to elementary learners. Participants will receive free curriculum, lunch and six professional development hours. To register for a FREE 6-hour workshop at GCU, please visit gcu.edu/codeorg

For elementary schools outside of the Phoenix area, Code.org facilitators can come to you! Teachers will receive the same free one-day, 6-hour workshop at your school or district if 25 or more elementary educators can attend—anywhere in the state!

For high schools, Code.org Arizona's Professional Learning Partners support 10 high school teachers from across Arizona in their instruction of AP Computer Science Principles for 2016-17. Teachers will make immediate application of this new curriculum organized around seven big ideas that are foundational to studying computer science. The seven teaching points are creativity, abstraction, data and information, algorithms, programming, the Internet and global impact.

For middle schools, Computer Science Discoveries, an introductory computer science course, empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving and fun. This course, beginning in spring 2017, is for middle schools that will complete the K-12 Computer Science Pathway.

GCU, Science Foundation Arizona and Code.org have dedicated this program to bring computer science to all students in Arizona. The goal is to build a strong computer science pathway toward college- and career-ready students.

Please join us on Nov. 10, from 5:30 to 7 pm at the GCU Golf Course to learn more about how we can advocate to make Arizona a prominent leader in computer science education.

To learn how your school can participate or how together we can advocate for computer science in Arizona, contact **Kathryn Scott-GCU** (kathryn.scott@gcu.edu) or **Linda Coyle-SFAz** (lcoyle@sfaz.org).

SEA STANDOUT: GCU is Premier Sponsor of the Chief Science Officer (CSO) Program

When it comes to science, technology, engineering and math (STEM) initiatives in Arizona, GCU is frequently at the forefront.

So it's only fitting that we should become a driving force behind the Chief Science Officers (CSO) program in Arizona's high schools and middle schools.

If this sounds like Star Trek (Mr. Spock was, after all, chief science officer aboard the Starship Enterprise), it's because these students advocate for STEM education at their schools. They essentially become "the voice" of STEM, said Amanda Hughens, GCU's K-12 STEM outreach manager.

"The first year was so successful", Hughens said, "that a classmate-elected group of six of the state's 140 chief science officers was invited to talk with lawmakers in Washington D.C. in May".

The result: A STEM program that started in Arizona may become a national model.

"The White House Office for Science and Technology heard about CSOs and wanted to learn more," said Hughens, an educator, professional development specialist and advocate for STEM programs at GCU and for the K-12 community. "They see this as a national initiative."

"The White House Science and Technology Office has asked that the initiative spread to all 50 states as early as November", Hughens said. "California, Oregon, Washington, Colorado and others are boarding the train".

CSOs are gaining in numbers.

"It's an initiative that is spreading rapidly, growing from 140 participants in Arizona during 2015-16 to more than 240 after elections were held this spring for the 2016-17 year," Hughens said.

CSOs are also helping transform the typical "nerd" and "geek" stereotype of students who excel at science and math.

"These are really some of the cooler kids at school," said Hughens.

The program was launched in 2015 by the Annual Arizona SciTech Festival Initiative, headed by executive director Dr. Jeremy Babendure. GCU became the program's premier sponsor, supported the Washington D.C. trip and hosted the CSO Summer Institute 2016 for more than 200 participants, including lawmakers, representatives from several states and White House officials.

"CSOs are science ambassadors who coordinate speakers, field trips and projects that will infuse excitement about STEM curriculum. They organize science cafes, family science nights and hands-on displays to teach youngsters about the "magic" of science," Hughens said.

"It's taking the scientific principles of things like magnetism and making that mystery into something really cool and brilliant," she said.

"CSOs meet with elected officials to advocate for science education and also meet as a "cabinet." At the same time, a community or business "Jedi" (yes, a Star Wars reference this time) mentors them," Hughens said.

Hughens added that the idea is for science program advocacy to come from the ground up and from the group most affected—the students themselves.

The CSOs also earned a warm Washington welcome.

The CSOs spoke to area legislators and attracted the attention of U.S. Rep. Raul Grijalva (D-AZ) who urged them to visit Washington D.C. to spread the word.

Accompanied by several adults, including Hughens who acquired polo shirts and bags for the group, six of the students departed May 16 for the nation's capital. GCU sponsored four of them.

There, the CSOs:

- · Held a congressional briefing with lawmakers from half a dozen states.
- Met individually with U.S. Sen. Jeff Flake, U.S. reps Trent Franks (R-AZ) and Ann Kirkpatrick (D-AZ) and personnel from the offices of U.S. Sen. John McCain (R-AZ) and U.S. Rep. Matt Salmon (R-AZ).
- Met with White House Chief Technology Officer Megan Smith and John Holdren, assistant director of the White House Office of Science and Technology, and with officials from NASA and the Department of Energy.
- Toured Marine Corps Base Quantico, visited Hogan's Alley and saw various FBI training facilities.

GCU is proud to walk alongside Arizona SciTech Festival in supporting an initiative that White House Chief Technology Officer Megan Smith hopes spreads throughout the nation!

For more information about the CSO program, contact Amanda Hughens at amanda.hughens@gcu.edu.

CANYON COMMUNITY- Students Inspiring Students

Seraphine Aziza, a senior at Betty Fairfax High School, was the first to receive exciting news on a Monday morning in early May.

Ninety-nine more seniors received the same news later that week.

They are the 100 high school students who are receiving full-tuition scholarships to GCU as part of a groundbreaking Students Inspiring Students pay-it-forward initiative to improve K-12 education.

The initiative is a collaboration of GCU, the GCU Scholarship Foundation, schools, businesses and philanthropic leaders. But at its core, it's about students helping students and the impact it can have in inner-city schools in Arizona.

The 100 students all received academic assistance while in high school at GCU's Learning Lounge, a free after-school tutoring program designed to improve the skills and confidence of both under-performing students and those taking advanced-level classes. Those 100 scholarship recipients will pay it forward as college students by providing 100 hours per year of mentoring and academic support at a GCU Lounge site to assist the next group of high school students behind them.

The end result is a grass-roots, self-funded initiative that is both sustainable and scalable in which students are inspiring students.

"We've seen the tremendous impact that a successful college student can have on a high school student with just a few extra hours of instruction per week," said Brian Mueller, president of GCU. "They're getting one-on-one help and mentoring from students who have been in their shoes and know what they're going through."

Aziza was surprised when GCU admissions rep Ashley Hardwick and other university officials walked into her classroom at 9 am at the end of the school year, purple balloons in hand, to give her the good news.

A few hours later at Maryvale High School, eight students were called into an office and handed a document by GCU Admissions Representative Kyle Speed. The reading of that document was followed quickly by smiles, hugs, calls to parents and many "Lopes Up" gestures from the university's newest group of students.

Over the next three days, 10 more inner-city schools were visited with full-tuition scholarships in hand, including Bourgade Catholic, North High, Carl Hayden, Alhambra, Franklin Police & Fire High, Central, Washington, Glenview Prep, Bioscience High and Metro Tech High.

Students Inspiring Students is an expansion of GCU's three-year-old GCU Lounge project with nearby Alhambra High School, which has had remarkable results. Alhambra is located in a diverse neighborhood filled with refugees from around the world. It is a school where more than 40 languages are spoken and more than 90% of students fall below the federal poverty level.

When the Lounge opened three years ago, Alhambra was rated a "D" school by the Arizona Department of Education based on the Arizona Instrument to Measure Standards (AIMS). Most recently, Alhambra was nine points away from becoming a "B" school. What's more, the number of high school graduates at Alhambra increased from 417 in 2013-14 to 536 in 2014-15; Alhambra seniors earned \$2.7 million in college scholarships in 2014-15, up from \$1.2 million in 2013-14; and the number of students taking advanced placement exams jumped from 174 to 302.

"Our students now feel like they have the weight of a university behind them," Alhambra's past principal Claudio Coria said, "and it's making a huge difference."

Mueller said there is a lot of discussion about what needs to be done to improve academic achievement in K-12 schools, but very few projects are actually doing something about it. "This is a proven project that works," Mueller added, "and it is about to explode and impact thousands of students."

"We believe this will be truly transformational and could become a model that will be emulated nationally."

Students Inspiring Students Scholarship opportunities are made possible by a fundraising campaign among the GCU Scholarship Foundation (501(c)(3) nonprofit), local businesses and philanthropic leaders. At an initial fundraising event in January, \$350,000 was pledged to the Foundation's Students Inspiring Students Scholarship Fund. The university matches all Students Inspiring Students donations to the foundation, bringing the total amount to be awarded thus far to \$700,000.

The goal is to raise enough in donations to award 800 full-tuition scholarships (200 per year) to qualified high school seniors and create an education-minded inner-city community with students who are passionate, motivated and capable of succeeding in college and the workplace.

"Public schools in this neighborhood are assets, they're not liabilities. And the kids in those schools are assets, not problems to be solved," Mueller said. "By investing in them, the trajectory of the entire neighborhood will change.

"The good news is that this initiative requires no government help or intervention and no tax increase. It's a way for business and philanthropic leaders to give back to their community and make a significant impact on education in Arizona."

With the 2016-17 school year beginning, the GCU Lounge is now ready to launch the same opportunity for what will be the next 100 students selected as recipients from the community.

For more information on the Students Inspiring Students Scholarship, contact Joe Veres (joe.veres@gcu.edu)

LOPES LATEST- GCU Athletics

GCU Athletics went big time when joining Division I and the Western Athletic Conference three years ago. Now, in the final year of the mandatory probationary period before being able to compete in Division I sanctioned tournaments, the Lopes welcome new players to our 21 D1 sports teams (10 men's and 11 women's teams).

Our teams, players and coaching staff continue to excel. This summer, our discus thrower, Tarasue Barnett, will represent Jamaica at the Olympics. Joining her will be swimmer Jade Howard and Coach Steve Schaffer representing Zambia. Joshua Braun of the men's basketball team and Mackenzie Phelps of the beach volleyball team were both named Division I Academic All-Americans. Over the past two years, we have opened the GCU Golf Course and built GCU Stadium, six tennis courts and four sand volleyball courts. We also added 2,000 seats to GCU Arena.

K-12 schools, groups and local organizations in partnerships with GCU through the Strategic Educational Alliances Department are able to attend numerous events free of charge, including theater and dance productions, basketball games, soccer games and more. In addition, schools and organizations with bands and choirs are often invited to showcase their school's talent by playing the national anthem at sporting events on GCU's campus.

On campus, K-12 student groups will have the opportunity to perform at center court in the 7,000-seat state-of-the-art GCU Arena and center field in GCU Stadium. Opening for the soccer season in fall of 2016, the Stadium has 6,000 seats (including covered seats for 3,000 fans) and grass berm seating for an additional 3,000, as well as a video display and sound system that's created a buzz on campus. The Stadium has already hosted the Mexican National Team for a practice during the Copa America game that took place in Glendale in June. Schellas Hyndman, GCU's head men's soccer coach, is a former NCAA Coach of the Year with over 450 wins in Division I. He is also a former MLS Coach of the Year for FC Dallas. In a state that loves the sport, GCU is proud to host the only D-1 team in Arizona.

In basketball news, GCU hosted its fourth annual Dan Majerle youth basketball camp through June and July at two separate locations. Thunder Dan and some of his recent graduates led the camps with great success. A women's basketball youth camp was also held on campus that helped young female basketball players improve their all-around game through drills, information sessions and scrimmages.

- *The next men's soccer game at GCU Stadium will take place on September 15 at 7 pm.
- *The first home men's basketball game of the 2016-17 season will take place on Nov. 3 at 7 pm.

For more information on GCU's sports teams and to view all sports schedules, please visit gculopes.com

PARTICIPANT CORNER

Canyon Christian Schools Consortium: The Canyon Christian Schools Consortium (CCSC) is delighted to welcome the <u>Association of Christian Schools International</u> (ACSI). ACSI brings over 400 schools that were not Canyon Christian Schools Consortium participants, thus allowing our footprint to grow across the country. Brand recognition of GCU increases as we work with several ACSI Regional Directors to have GCU representatives and professors provide high-quality teacher in-service opportunities.

The CCSC Alliance is also happy to welcome the Diocese of San Diego. The <u>Diocese of San Diego</u> joins the Dioceses of Los Angeles, Orange County, Stockton and Phoenix. The Diocese includes six high schools, 46 elementary schools and 38 preschools. Four of the six high schools are new to the consortium. The diocese encompasses all of the Imperial and San Diego counties.

For more information on CCSC, please contact Greg Harman at greg.harman@gcu.edu

Participants in Learning, Leading and Serving: Participants in Learning, Leading and Serving (PLLS) is once again holding the Principals Collaborative Community (PCC). The PCC is a program in its fourth year at GCU, serving approximately 60 West Valley principals and assistant principals. The program is designed to provide participants with valuable resources and professional development, along with time to share and learn from one another in open dialogue. Participants receive two hours of professional development credit for each of the four meetings attended. The leadership series in 2015-16 focused on strategies and tools to assist school leaders with retaining teachers. This year, the four-part series will include inspiring, nationally recognized presenters who will focus on:

- · Breakthrough leadership strategies designed to improve staff performance and overcome resistance to change
- · Strategies for strengthening administrative leadership
- · How to start a STEM Program including the use of a makers space
- · Strategies to initiate a renewed sense of success in the classroom for teachers

For more information on PLLS, please contact Beverly Hurley at beverly.hurley@gcu.edu.

Canyon Educational Participants: The Canyon Educational Participant (CEP) program welcomed several new youth-focused organizations including <u>Big Brothers Big Sisters AZ</u>, <u>Girl Scouts AZ</u> and <u>Boy Scouts AZ</u>. GCU provides opportunities for these groups to attend events, as well as recruit staff, volunteers and interns.

For more information on CEP, please contact Leigh Critchley at leigh.critchley@gcu.edu

Alliance Program for Homeschool Achievement: The Alliance Program for Homeschool Achievement (ALPHA) is excited to announce the Going the Distance Series, a group of free seminars that focus on preparing your home-schooled teen for the college experience.

For more information on how to sign up, contact Daniel Cruz, Senior Manager of Academic Alliances, at daniel.cruz@gcu.edu.

GCU MAGAZINE

The biggest issue of GCU Magazine introduces 2016-17 by featuring inspirational stories of two recipients of the Students Inspiring Student Scholarship, tales of two highly successful basketball coaches (former GCU athletes) and campus development updates, such as the brand-new, state-of-the-art GCU Stadium. This issue also highlights the opening of Grand Canyon Theological Seminary and Grand Canyon Beverage Company, our campus coffee shop run by the students, for the students. Read more about these top stories in the digital version of GCU Magazine.

If your group or organization would like to communicate any information to be featured in the Participant Corner in our next newsletter, please contact Cole Bucholc at cole.bucholc@gcu.edu by Nov. 15, 2016.