

HIGHER ENGINEERING EDUCATION ALLIANCE PROGRAM

Quarterly Newsletter | July 2016



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Obama Highlights ASU During Trip to Vietnam

by Bret Hovell | May 23, 2016



President Barack Obama and Vietnamese President Trần Đại Quang walk to a meeting after shaking hands at the Presidential Palace in Hanoi, Vietnam, on Monday. The president is on a weeklong trip to Asia as part of his pivot to Asia, which is designed to boost economic and security cooperation. Photo by Carolyn Kaster/AP

President Barack Obama, during a visit to Vietnam, spoke of Arizona State University's efforts in that country to improve education in science and engineering, part of ASU's efforts to engage globally and develop solutions to problems around the world.

In his opening statement during a press conference Monday with Vietnamese President Trần Đại Quang, Obama cited the efforts of major American institutions in helping to modernize the country with which the United States spent so many years at war.

"American academic and technological leaders, including Intel, Oracle, Arizona State University and others, will help Vietnamese universities boost training

in science, technology, engineering and math ..." Obama said.

"With this visit, the United States and Vietnam have agreed to a significant upgrade in our cooperation across the board. We're taking new steps to give our young people the education and skills that they need to succeed."

The ASU program to which the president referred is the Higher Engineering Education Alliance Program, or HEEAP, which trains Vietnamese professors from eight universities on more innovative ways to teach engineering.

HEEAP – run by ASU's Ira A. Fulton Schools of Engineering – is modernizing traditional Vietnamese theory-based engineering programs by introducing

applied and hands-on instructional approaches. In 2014, Ho Chi Minh City University of Technology computer science and computer engineering programs achieved ABET

The Accreditation Board for Engineering and Technology accredits college and university programs in the disciplines of applied science, computing, engineering, and engineering technology at the associate, bachelor, and master degree levels.

accreditation, making them the first in Vietnam to do so.

Since its launch in 2010, HEEAP has trained 247 lecturers from eight partner institutions who, upon returning to Vietnam, are teaching and graduating

work-ready students who possess the applied and technical communication skills required by multinational corporations. There has been an emphasis on attracting women to the field; 65 of the 247 trained lecturers were women.

In addition, more than 2,000 Vietnamese faculty have been trained at HEEAP's in-country workshops. And the Vocational and University Leadership Innovation Institute, an educational capacity-building and training workshops and support program that is part of HEEAP, has trained more than 1,100 faculty leaders at dozens of events since 2012.

HEEAP's founding partners in 2010 were the United States Agency for International Development and the Intel Corporation. Since then, HEEAP has added partnerships with Siemens Corporation, Cadence Inc. and Danaher Corporation

Danaher Corporation's brands include Fluke, Tektronix, and Keithley companies.

Later during the president's trip, Secretary of State John Kerry also mentioned ASU's work in Vietnam during a press conference.

"We're also working together, excitingly, in the academic arena," Kerry said. "And I can't emphasize how key that is in terms of transformational long-term impact of a relationship. The Institute of International Education, Arizona State University, Harvard Medical School, the University of Hawaii all have partnerships with institutions in Vietnam, several involving participation by the private sector. And tomorrow, I will have the privilege of launching the formal launch of Fulbright University Vietnam, which will be a full-fledged, non-profit and totally academically free institution."

Obama's mention of ASU came in a section of his remarks discussing improving relations between the U.S. and the communist nation. He spoke of other universities and major corporations working to improve the education system (Harvard Medical School, Johnson & Johnson) and announced that the Peace Corps would start sending volunteers to Vietnam for the first time.

All of these partnerships, Obama said, will help to create a better relationship between the two countries.

"The friendship that our people forge will bring us closer together for decades to come," he said. ■

SOURCE: asunow.asu.edu/20160523-global-engagement-obama-mentions-asu-during-trip-vietnam

Vietnam Engineering Education Conference Opens (VEEC 2016)

Vietnam Investment Review | April 14, 2016



Vietnam's Higher Engineering Education Alliance Program (HEEAP), now in its sixth year, heads into the 2016 Vietnam Engineering Education Conference (VEEC) on April 14 and 15 with clear goals to advance the accreditation status of its engineering programmes and expand strategic partnerships with industry.

Founding partners Intel Corporation and Arizona State University (ASU) launched HEEAP in 2010 with funding from the US Agency of International Development (USAID). The Fourth Annual VEEC conference, held in Ho Chi Minh City, brings together the academic, industry and government communities for two days of interactive plenary sessions, panel discussions, technical sessions and seminars. This year's focus is workforce competitiveness: Partnerships Driving Human Capital Skills and Standards.

In alignment with the Trans-Pacific Partnership and the Association of Southeast Asian Nations (ASEAN) Economic Community, Vietnam's academic engineering programmes have begun leveraging public-private alliances to ensure that higher educational systems produce workforce-ready graduates with enhanced skills to innovate in the country's economy.

"HEEAP has proven to be an outstanding example of the powerful difference that can be made with a strong public-private partnership," said Sherry Boger, vice president and general manager of Intel Products Vietnam. "ASU has been leading the programme to achieve key objectives and today Intel is hiring quality students who have benefited

from the improved instruction, curricula and labs."

In order to attract additional partnerships, with support from USAID, Intel, National Instruments, Pearson and other sponsors, HEEAP has endeavored to move Vietnam's top technical universities and vocational schools toward international accreditation, including the Accreditation Board for Engineering and Technology, Inc. (ABET). The Vocational and University Leadership and Innovation Institute (VULII) was launched in 2012 to provide capacity-building programmes within the Vietnamese educational system, from ministry officials and university rectors to administrators, academic and professional staff, and engineering faculty leaders preparing the next generation for the engineering workforce.

"Previously we had strategic goals, but nobody remembers. We imposed those goals from the rector down to staff," explained Dr. Dao Khanh Du, rector of Cao Thang Technical College. "Now they are developed based on a bottom-up approach. Ownership leads to responsibility, and people start to proactively work towards these strategic goals. It is a big success for us."

VULII programmes, including workshops and coaching HEEAP and ASU staff, have prepared leadership and



Left to right: Javier Perez Bordallo (*Director of the Industrial Engineering Department, Intel Products Vietnam*), Le Van Hai (*Chief Representative and Market Access Manager, Rockwell Automation Southeast Asia, Vietnam*), Vu Lan Anh (*Education and Workforce Leader, The World Bank Group*), Vo Quang-Hue (*Managing Director, Robert Bosch Vietnam Co. Ltd.*), Bruce Newton (*General Director, eSilicon Corporation*), and Jeffrey Goss (*HEEAP Director and Vice Provost, Arizona State University*).

faculty to undertake the accreditation process with confidence.

“In 2014, Ho Chi Minh City University of Technology became the first Vietnamese university to receive ABET accreditation recognising two of its programmes,” said Dr. Kathy Wigal, ASU assoc. director for Curricular Innovation, “and many have sought membership in the ASEAN University Network (AUN).”



Volunteer students from HCMC University of Technology and Education (HCMUTE) at VEEC 2016.

To date, more than 400 Vietnamese lecturers have trained at ASU and are now preparing graduation-ready students with the applied and technical communication skills required by multinational corporations. Last year, a cohort of instructors from the Vietnam National University – Ho Chi Minh City system visited ASU the first in series of

special projects, the Internet of Things (IoT). Additionally, a \$500,000 grant from the US Department of State will bring 44 academic fellows – all high-achieving undergraduate students from Southeast Asia – to Tempe, Arizona, to attend two ASU-hosted institutes as part of US President Barack Obama’s signature programme: the Young Southeast Asian Leaders Initiative (YSEALI).



VEEC 2016 attendees during the conference’s keynote speaker.

“A number of reforms in this university start from ASU. A concrete example is our establishment of School of Innovation and Entrepreneurship,” said Dr. Do Van Dzung, rector of Ho Chi Minh City University of Technology. “Also, the implementation of online, mobile and blended learning has created a revolution for the teaching and learning culture in the university.” ■

[SOURCE: vir.com.vn/vietnam-engineering-education-conference-opens.html](http://vir.com.vn/vietnam-engineering-education-conference-opens.html)

Former HEEAP cohort participant to receive up to \$33 million to produce “smart glasses”

By Eric Wirtanen | January 29, 2016



Ba-Hai Nguyen had his “smart glasses” financed by Vietnamese Prime Minister Nguyễn Tấn Dũng at a meeting at the Ministry of Science and Technology. Photo courtesy of Ba Hai Nguyen

After Ba-Hai Nguyen’s presentation on his “smart glasses,” which help people that are visually impaired get around, Vietnamese Prime Minister Nguyễn Tấn Dũng asked for more details at a meeting in September. The Prime Minister then made the decision to finance the million-dollar project of manufacturing the glasses for all Vietnamese people that are visually impaired. The meeting between young scientists and the prime minister took place at the Ministry of Science and Technology

Nguyen, a lecturer at the Ho Chi Minh City University of Technology and Education, has intended to produce the smart glasses since he was a student but lacked the opportunity until he returned to Vietnam in 2010 after studying overseas. The glasses are programmed to recognize obstacles and vibrate to alert users so that they can find their way around.

He participated in a Higher Engineering Education Alliance Program (HEEAP) faculty development training in 2012

at Arizona State University. HEEAP is a partnership among the United States Agency for International Development (USAID), ASU's Ira A. Fulton Schools of Engineering and Intel. It launched in June 2010 to help improve the quality of higher education, specifically in mechanical and electrical engineering in Vietnam.

"The HEEAP program has given me a really good chance to learn new working styles, the knowledge of a new model of transforming higher education learning and research," Nguyen said. "During that time, experts at ASU were really helpful and supported me and my colleagues."

Jeff Goss, executive director for the Office of Global Outreach and Extended Education and assistant dean in the Fulton Schools, has influenced Nguyen with his passion. "He transfers his fire to me anytime we meet and I get a lot of inspiration and innovation from his mindset, working method and expertise," he said. "These meetings give me more confidence to overcome tough moments during my research career and gain

several small results step-by-step during last three years."

"Those small results are evidenced by my discussion with Prime Minister Nguyễn Tấn Dũng and the happy moment for all the people who are sight-impaired in Vietnam happens because of that unique passion."

The first version of the glasses weighed two kilograms and had a production cost of approximately VND20 million (nearly \$1,000). After nine upgrades the smart glasses now weigh only 200 grams and have a production cost of VND2 million (less than \$100). With product quality as high as similar foreign products and significantly lower production costs, Nguyen has received many orders for the glasses, even from overseas. They are robust with an aluminum frame and a high capacity battery of three days. The glasses were given a patent last year and feature obstacle avoidance with a novel method of displaying haptic feedback for the visually impaired and intuitive interface design which allows users to "feel"

the distance, position and direction of obstacles in their path as well as to know the battery level.

Vietnam currently has 1.2 million people who are sight-impaired, of which about 300,000 are legally blind. Nguyen previously turned down an offer to commercialize the "smart glasses" as he wished to donate his invention to the State so that it could help deliver the high-tech product to sight-impaired people at the lowest cost.

Nguyen, who will be leading the University of Technology and Education's newly launched School of Innovation Entrepreneurship, said his biggest takeaway from his involvement with HEEAP is the inspiration to innovate and make sustainable changes in both education and research in Vietnam with the slogan "learn globally and apply locally." ■

SOURCE: fullcircle.asu.edu/outreach/former-heeap-cohort-participant-to-receive-up-to-33-million-to-produce-smart-glasses/

Grants expand Fulton Schools educational outreach in Southeast Asia

by Rose Serago | January 23, 2016

The Ira A. Fulton Schools of Engineering take pride in producing graduates who benefit from innovative and hands-on classroom projects, collaborative campus workspaces and impactful student programs.

So why not promote these breakthroughs in engineering education across the globe?

Recent grants will further Fulton Schools initiatives that aim to do just that.

The grants enable exciting possibilities: bringing the next generation of Southeast Asia's engineering and technology leaders to Arizona State University to think about social change; sending teams of Fulton Schools students to Vietnam to work with local students on engineering-based problems; and creating collaborative maker spaces for hands-on learning in Vietnam.

The office of Global Outreach and Extended Education (GOEE), seeded within the Fulton Schools at ASU, is leading these efforts with grants from the U.S. Department of State and the United States Agency for International Development (USAID).

Developing leaders to spark international social change

A \$500,000 grant from the U.S. Department of State will bring 44 academic fellows – all high-achieving undergraduate students from Southeast Asia – to Tempe, Arizona, to attend two ASU-hosted institutes as part of U.S. President Barack Obama's signature program: the Young Southeast Asian Leaders Initiative (YSEALI).

The grant was awarded to a collaborative team from Fulton Schools of Engineering and the College of Public Service and Community Solutions at ASU.

Launched in 2013, YSEALI is strengthening ties between the United States and Southeast Asia, and sparking innovation and initiatives that foster social change within the region.

"We're working with the U.S. government to bring students to ASU, where they can develop skills that will prepare them to become future leaders and ambassadors within their home countries," said Jeff Goss, the principal investigator for the project supported by the grant, as well as the executive director of GOEE and an assistant dean in the Fulton Schools.

At the Social Entrepreneurship and Economic Development Institute, hosted by the Fulton Schools, the students will shadow successful community organizers, learn tools for effective communication and leadership, explore the key elements of human-centered design, and develop entrepreneurial ideas and business models.



A new grant from the United States Agency for International Development (USAID) will enable the construction of two maker spaces in Vietnam that are similar to the hands-on Startup Labs on ASU's Polytechnic campus. Visiting Vietnamese faculty members have learned about innovative curriculum development in the Startup Labs during visits to ASU as part of the HEEAP Consortium. Photographer: Jessica Hochreiter/ASU

During the institute event, the YSEALI Fellows will network with Fulton Schools' students in classes, and with leaders of student organizations and student projects to promote collaboration.

"This provides our students the opportunity to consider engineering in a global context and to engage in the implementation of the YSEALI student projects," Goss said.

Each YSEALI Fellow will generate a project proposal that will serve as the blueprint for a social change initiative relevant to his or her home country. At the end of the institute event students will travel to Washington, D.C., to demonstrate the skills and knowledge they gained by presenting their capstone proposals to the U.S. State Department. Students will also attend seminars and meet with McCain Fellows and diplomatic leaders at the McCain Institute, an organization established by U.S. Senator John McCain and his family that is dedicated to advancing global leadership initiatives.

"When [the YSEALI students] return to their home countries they will know social entrepreneurship and economic development 'best practices' and will have

developed skills to help them transform their ideas into actions that can benefit society," said David Benson, a senior lecturer in the Fulton Schools.

Benson will serve as the academic director for the Social Entrepreneurship and Economic Development Institute with support from GOEE program coordinator Chani Clark.

Exporting new curricula, maker spaces to Vietnam

The Fulton Schools are also expanding activities in Vietnam through the Building University-Industry Learning and Development through Innovation and Technology (BUILD-IT) Alliance, which brings universities, government and industry partners together to stimulate innovation in Vietnamese higher education. A \$5.8 million grant from USAID and \$8 million in investments from more than 20 industry partners support this initiative.

The BUILD-IT Alliance is the latest advancement in a series of initiatives led by the Fulton Schools that are aimed at improving engineering education in Vietnam.

In 2009, GOEE first connected with Vietnam through a partnership with

Intel that included a \$100,000 grant for faculty in the Fulton Schools to develop an interdisciplinary graduate curriculum in the Semiconductor Packaging and Manufacturing specialization – with the goal of exporting this knowledge abroad.

The grant enabled faculty to develop expertise in this area within ASU, then to impart their knowledge through a series of curriculum development workshops for faculty at schools in Asian countries, including Vietnam.

In the six years since the original partnership, additional grants totaling more than \$25 million from founding partners Intel and USAID and other industry, academic and government partners have supported a transformative national higher education collaboration – the Higher Engineering Education Alliance Program. Known as HEEAP, the program lead by ASU is leading the redesign of top technical universities in Vietnam through improved teaching methods, a leadership institute focused on strategic change and accreditation, and faculty training, coaching and mentoring both at ASU and across Vietnam.

"With the BUILD-IT Alliance we are furthering this impact by introducing new



and innovative curricula approaches to faculty members in Vietnam that span a variety of STEM (science, technology, engineering and math) disciplines,” Goss said.

This includes sharing some of the Fulton Schools’ most innovative and successful student programs and initiatives, such as the Engineering Projects in Community Service (EPICS), eProjects programs and the eSpace model.

“We intend to create a bilateral collaboration of curricula – and students – between the Fulton Schools and Vietnamese technical universities,” Goss said.

As part of the BUILD-IT Alliance the Fulton Schools will construct two collaborative maker spaces in the Vietnamese cities of DaNang and Ho Chi Minh City for students to design, build and test products, services and other inventions. The goal is to better prepare the students to become the next generation of engineers, scientists and technologists and have a positive impact on Vietnam’s social and economic development.

“These are spaces where students go to build and work as real engineers – from collaborating on hands-on projects with industry sponsors to developing their own inventions,” Goss said.

These maker spaces will be similar to eSpaces at ASU’s Tempe campus that

serve as hands-on learning spaces for freshman engineering students.

The spaces will also provide a place for collaboration between Vietnamese and visiting Fulton Schools students, particularly students in the EPICS program, which organizes teams of undergraduate students to design, build and deploy systems to solve engineering-based problems for various communities and not-for-profit organizations.

“Next year we expect to send ASU EPICS teams to Vietnam, where they can tackle engineering problems relevant to the local community alongside Vietnamese students,” Goss said.

Transforming higher education in Vietnam

The BUILD-IT Alliance was proposed by GOEE in response to USAID’s call for concepts to stimulate innovation in Vietnam’s higher education system through public-private alliances. Universities and non-governmental organizations across the nation submitted proposals. This is the third Global Development Alliance grant that the Fulton Schools have received.

The BUILD-IT Alliance will function within a dynamic ecosystem of students, faculty, industry and government collaborators. In addition to introducing new student learning platforms such as maker spaces for hands-on engineering education and curriculum improvements across Vietnam, the alliance aims to implement institutional policy change.

This agenda will be advanced through semi-annual events hosted by visiting ASU faculty and staff that include executive leadership training and a forum geared toward women.

Sherry Boger, vice president and general manager of Intel Products Vietnam, said, “HEEAP has proven to be an outstanding example of the powerful difference that can be made with a strong public-private partnership. ASU has been leading the program to achieve key objectives and today [Intel is] hiring quality students who have benefited from the improved instruction, curricula and labs.”

Since 2002, GOEE has partnered with international academic institutions, governments and corporations to design professional development programs – giving Fulton Schools faculty a way to directly influence the professional development of a global network of engineers.

Since 2010 more than 4,700 faculty, institutional leaders and quality assurance professionals – 27 percent of them females – have received training through HEEAP.

“The HEEAP Consortium and its projects like BUILD-IT are attractive because they span many different sectors,” Goss said. “Businesses are involved because they benefit from the workforce success, universities benefit from improved student learning and retention, and all of these things attract government support because they improve society.” ■

SOURCE: fullcircle.asu.edu/fulton-schools/grants-expand-fulton-schools-educational-outreach-in-southeast-asia/

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Professors from Vietnam learn teaching methods

by Eddie Keller, Cronkite News
May 27, 2016



A professor from a university in Vietnam takes part in an exercise to build a hologram as part of the Higher Engineering Education Alliance Program at ASU. (Photo by Eddie Keller/ Cronkite News)

More than 20 engineering professors from Vietnam are putting together an apple, mirrors, lenses and papers that they can use to project a hologram.

Twenty minutes later, they are laughing and humbled, most of them unable to create something that works. Lesson learned.

The professors are part of an Arizona State University program President Barack Obama put on the international stage this week during his trip to Vietnam.

Obama praised ASU's Higher Engineering Education Alliance Program as a boon to Vietnamese education.

"American academic and technology leaders, including Intel, Oracle, Arizona State University, and others, will help Vietnamese universities boost training in science, technology, engineering, and math," Obama said.

David Benson, the academic director of the program, said it shows visiting professors from Vietnamese universities new ways to teach and explain material to their students.

The program, called HEEAP, shows professors from Vietnam the value of teaching hands-on techniques, such as with the hologram model. The goal is to help students learn in diverse ways rather than relying mainly on memorization.

ASU and Intel joined forces to launch the program more than five years ago, with funding from the U.S. Agency for International Development.

"When HEEAP was launched, it was because Intel envisioned a transformation of engineering education in Vietnam," said Jeffrey Goss, executive director. The ultimate goal was to help "prepare Vietnamese engineers to compete in a global economy."

Benson said the program is to help professors when they return to their university classrooms in Vietnam.

"We want them to really dive in as students and then step back later on, 'What did I learn? How did I learn it? How can I then apply this to my class so my students can have this experience?'" Benson said.

Minh Lam, a professor at the Industrial University of Ho Chi Minh City, said the six-week summer session will change the way she teaches.

"The program did inspire me to change my existing course," Lam said. "After that program, I hoped that I can inspire my students, too."

"I've learned that everything is possible – even for a first-year student," Lam said. "The good thing is that if we change the course, the student can learn more. Finally, they can create some new things."

The professors in the program not only learn in Arizona. They teach others.

"When you do something across cultures, you're looking to understand them as much as they're looking to understand you," Benson said. ■

SOURCE: cronkitenews.azpbs.org/2016/05/27/vietnam-professors-learn-teaching-methods-asu/



BUILD-IT

Building University-Industry Learning and Development through Innovation and Technology (BUILD-IT)

About Us

Based on the pillars of institutional policy, quality, curriculum, faculty innovation, and technology, BUILD-IT leverages deep and diverse government-industry-academic partners that share a goal of tightly linking science, technology, engineering, and math (STEM) instruction in Vietnamese higher education institutions to the needs and capabilities of industry partners to produce graduates who can lead inclusive, technology-based growth.

- Strengthens Higher Education Policy
- Enables University-Private Sector Collaboration
- Improving Academic Programs and Outcomes

Our Activities

Our activities are driven by the active voice of four multi-stakeholder solutions councils, supported by a network of maker innovation labs and the HELIX web-based repository.

- Student-industry engagement events
- Executive Leadership training
- Women in STEM mentorship programs and Leadership forums
- Developing Quality training
- Certified Facilitator programs
- Project-based curriculum
- Maker Innovation Network
- HELIX Portal

For more information about BUILD-IT, our news and events, visit builditvietnam.org

ASU's Southeast Asia engineering outreach accelerates in Vietnam, expands to Indonesia

by Terry Grant | June 7, 2016



President Barack Obama cites ASU's contributions to Vietnam education during a news conference in Hanoi. Photo courtesy of Jeffrey Goss.

Six years after the Higher Engineering Education Alliance Program (HEEAP) was launched in Vietnam, President Barack Obama highlighted Arizona State University's efforts during a May 22 news conference from Hanoi. The following day, Secretary of State John Kerry also noted that such academic partnerships are key in terms of a "transformational, long-term impact of a relationship" during a news conference in Ho Chi Minh City.

The program, which began as a partnership between ASU's Ira A. Fulton Schools of Engineering, the United States Agency for International Development (USAID) and Intel, was created to introduce professors from eight Vietnamese universities to engineering teaching practices and curriculum focused on accreditation. The international kudos coincide with an expansion of the program both within Vietnam and into Indonesia.

To date, HEEAP has provided engineering education support and training to nearly 5,000 Vietnamese participants, 27 percent of whom are women, from 20 universities and technical programs, and has invested

more than \$25 million in higher education innovation. Ho Chi Minh City University of Technology (HCMUT) has achieved ABET accreditation and several Vietnamese universities have acquired Association of Asian Nations (ASEAN) University Network (AUN) Quality Assurance accreditation.

"ASU's presence in Vietnam has contributed significantly to strengthening its position with both ASEAN and the Trans Pacific Partnership," explained Jeffrey Goss, Global Outreach and Extended Education (GOEE) and HEEAP executive director. "The next phase of the program will deepen that path and extend it into Indonesia."

BUILD-IT expands program in Vietnam

The Building University-Industry Learning and Development through Innovation and Technology (BUILD-IT) program, the third of the HEEAP initiatives, was launched in May following a partners' kick-off meeting which included industry, government and academic partners, with acknowledgement from President Obama. On June 2, Ho Chi Minh City University of Science (HCMUS), one of the first to sign a memorandum of understanding (MoU), hosted a commemorating event for USAID and BUILD-IT implementing partner, ASU.

BUILD-IT links science, technology, engineering and math (STEM) instruction to the needs and capabilities of industry partners, with the goal of creating graduates who can lead inclusive, technology-based careers. More than 20 industry partners currently support the program.

HCMUS is one of a dozen universities slated to partner with BUILD-IT. Additional academic agreements and new industry partnerships are ongoing, with initial alliance program activities scheduled to begin this summer. A key objective of HCMUS is accreditation by the AUN in the areas of biotechnology, chemistry, mathematics and computer science.

"When HEEAP was launched, it was

because Intel envisioned a transformation of engineering education in Vietnam," said Goss. "It sought to do so in a way that would advance education leadership, faculty training, teaching methodology, curriculum and, perhaps most importantly, standards-based outcomes that would prepare Vietnamese engineers to compete in a global economy. The BUILD-IT Program represents that ability to compete."

According to Kathy Wigal, Ed.D., associate director of Curricular Innovation, GOEE, who will administer the BUILD-IT Program, HEEAP-trained Vietnamese faculty will serve as the link in developing university STEM education in alliance with industry partners seeking graduates prepared for technical careers.



Duong Thi Cam Tu, lecturer at HCM University of Technology and Education and HEEAP Faculty, waits for President Obama's arrival in Ho Chi Minh City with Jeffrey Goss, HEEAP Director. Photo courtesy of Jeffrey Goss.



Kathy Wigal (left), associate director, Curricular Innovation, GOEE at ASU, served as a panelist for an ASEAN Business Council Human Capital Development Forum on Best Practices in Public-Private Partnership in Human Capital Development. Photo courtesy of HELM.

LEEAP in Indonesia

A two-day symposium in Jakarta on Leadership in Engineering Accreditation Program (LEEAP) Symposium in Jakarta in late May marked a one-year USAID Higher Education Leadership and Management (HELM) special initiative designed to support university-level engineering programs to become globally competitive and achieve AUN and ABET accreditation.

The initiative featured a series of workshops and mentoring experiences led by an ASU team. During the symposium, five academic program teams showcased their progress for an audience representing 40 Indonesian universities, industry representatives and Indonesian and United States government officials.



Kathy Wigal confers with a Ministry of Manpower representative during the ASEAN Business Council Human Capital Development Forum. Photo courtesy of the ASEAN Business Council.

The symposium was followed by the US-ASEAN Business Council Forum on Human Capital Development, co-organized and co-sponsored by ASU, for a gathering that brought together representatives from industry, academia and government. The forum addressed the strengthening of industrial and innovation elements of Indonesia's economy by improving the domestic ecosystem for human capital and workforce development.

Led by Martin Gil, President-Director of Coca-Cola Indonesia, the forum was structured around panel discussions. "The purpose of the forum today is to bring together key representatives from the private sector, government and academia to discuss ways of improving the domestic ecosystem for human capital and workforce development," Gil told the assembly.

Wigal, who served as a panelist during the discussions, invited attendees to participate in a follow-up dialogue to explore public-private human capital development alliances in Indonesia. "We have learned a great deal through our year-long special initiative and collaboration with the HELM project, and look forward to developing deep and diverse partnerships that share the goal of tightly linking STEM instruction in higher education institutions to the needs and capabilities of industry partners," Wigal said. "Producing graduates who can lead inclusive, technology-based growth begins with developing relationships and coming together. Today we have taken the first step."

Representatives from the U.S. Embassy, Indonesian Ministries and boards, and U.S. corporations including Microsoft, Amazon, Google, Honeywell and others, expressed interest in partnership opportunities and the creation of an alliance model.

The ASU team's activities in Indonesia culminated in an Assessment and Evaluation Workshop for Andales University in Padang. Wigal and Scott Danielson, an associate professor in the Polytechnic School of Engineering Programs, led their fifth workshop in the series. Focused on assessment and evaluation of student learning, the participants included 25 faculty members from Indonesian civil, electrical, environmental and mechanical engineering programs.

ASU in Southeast Asia – Jeffrey Goss



President Barack Obama addresses the audience during the Youth in Southeast Asia Leadership Institute (YSEALI) Town Hall in Ho Chi Minh City. Photographer: Jeffrey Goss/ASU.

"At the end of the news conference, President Obama walked the conference hall bowl and I had the chance to shake his hand and introduce myself from ASU," said Goss, who noted that the President told him "Arizona State is doing great work in Vietnam and please keep doing it...it is important to the U.S.-Vietnam Partnership."

President Obama arrived in Ho Chi Minh City late in the day on May 24 and spent time at the Dreamplex – an incubator and co-working space in the heart of Saigon. "We were successful getting two of our former HEEAP faculty approved to showcase their research and ventures," explained Goss. "They had one-on-one discussions with the President and Secretary Kerry during this event. We had them proudly in ASU polo shirts."

Photos of the Dreamplex event won't be available through the Secret Service until later in June, but "it will be great to see our Vietnamese faculty, counterparts meeting with the President," said Goss. The President asked one of the faculty about his experience at ASU and then said "Wow, I keep hearing about Arizona State all over the place."

ASU was again featured at the Young Southeast Asian Leaders Initiative (YSEALI) Town Hall. "This was an event where I had the opportunity to sit in the front row with United States Ambassador to Vietnam Ted Osius, Vietnam Ambassador Pham Quang Vinh, Secretary of State John Kerry, and Vice President and General Manager of Intel Products-Vietnam Sherry Boger, among others," said Goss. "There were around 800 YSEALI alumni in the audience, six of whom had recently completed the YSEALI Program at ASU. It was a very gratifying experience."

Developing international faculty relationships – Kathy Wigal

According to Wigal, incentives and motivations for change and improvement will become more intense as the ASEAN economic borders are lowered and institutional autonomy increases. In 2014, Vietnam's National Assembly passed a law to expand higher education investment and increase autonomy at the system and institutional levels, giving institutions and faculty greater freedom

to make curriculum decisions and set institutional operating policy. "This will allow the institutional leadership to respond with policies, curriculum and competencies to reshape their institutions to meet market needs, promote innovation and foster inclusion," Wigal explained.

And word of ASU program successes in Indonesia is spreading. "That's how we got involved in Indonesia – if Vietnam can do it, then why not Indonesia?" she said. "As one of our HEEAP Rectors observed, they are all in the same house now," referring to the ASEAN community.

Evidence to all ASU staff working in Southeast Asia is how strong the drive is within the faculty and leadership to improve STEM education in their countries. "It's rewarding to see those we have trained through the HEEAP faculty development cohorts go on to become program leaders and deans. They see that they can make a real change in education, Wigal said. "That's a real motivator for them, and for our team."

Wigal says she now has friends and colleagues in both Vietnam and Indonesia, noting that she feels very connected to faculty in HEEAP's partner universities, and beyond. "You would be surprised how many people will notice my ASU shirt – they've heard of ASU and ask me about our work no matter where I travel, whether its Southeast Asia for work or on my recent vacation in Ireland – everywhere they know ASU – we are world class!" ■

SOURCE: fulcircle.asu.edu/outreach/asus-southeast-asia-engineering-outreach-accelerates-vietnam-expands-indonesia/



Kathy Wigal offers welcoming remarks and opens the LEEAP Symposium in Jakarta with Menuk Primawati, Technical Assistant from USAID-HELM Higher Education Leadership and Management. Photo courtesy of Kathy Wigal.

YSEALI 2016 Serves as a Catalyst to Innovation and Fosters Social Change

by Dr. David Benson



During the Spring semester of 2016, the Global Outreach and Extended Education program from Arizona State University's Ira A. Fulton Schools of Engineering hosted 23 academic fellows representing all ten of the ASEAN countries for a five-week institute on social entrepreneurship and economic development. The social entrepreneurship and economic development program at ASU was developed by a collaborative team of professionals from the Fulton Schools of Engineering and the College of Public Service and Community Solutions as a part of a grant from the U.S. Department of State to host two institutes belonging to President Barack Obama's signature program – the Young Southeast Asian Leaders Initiative. Launched in 2013, YSEALI was designed to not only strengthen ties between the U.S. and Southeast Asia, but also to catalyze innovation and initiatives to foster social change among various groups in the region.

During their five weeks in United States, the academic fellows explored topics such as social innovation, effective networking, leadership and communication strategies and worked to develop their own entrepreneurial ideas and business models. For the social entrepreneurship

and economic development institute, the human-centered design process played a central role as they explored the relationship between their own interests and the needs of the communities they want to serve by their enterprises.

In addition to completing institute-specific coursework, the YSEALI academic fellows attended ASU classes, and visited with the founders of successful social entrepreneurship efforts across the Phoenix Metro area. The academic fellows also participated in a comprehensive study tour of the U.S. Southwest where they saw the Grand Canyon, visited with members of the Navajo Nation in Northeast Arizona and experienced horseback riding in Tucson, Arizona. After touring Los Angeles and San Francisco, their cultural excursion ended at the birthplace of YSEALI: Washington, D.C., where they demonstrated the skills and knowledge they gained by presenting their capstone proposals to the State Department.

Two of the YSEALI academic fellows from the 2016 institute were from Vietnam. Anh Nhat Nguyen, a lecturer of economics at Hue University's College of Economics, arrived with a desire to improve post-secondary education resources in her field of study. Upon completion of the program, Nguyen

is intent on developing an education program similar to the Higher Engineering Education Alliance Program for her home university. Duy Hoang Trinh, a recent graduate of Can Tho University, had developed a coffee shop lending library as a personal project prior to coming to ASU. Over the course of the five-week institute, one of the possible business model "pivots" that Trinh explored was the creation of a motorcycle-driven mobile book lending system which could be used to extend the impact of his coffee shop and bring reading resources and opportunities to surrounding communities.



Women in STEM

August 5, 2016
University of DaNang

BUILD-IT invites you to the 1st Women in STEM Conference: Women in Entrepreneurship and Innovation in DaNang, Vietnam

This event will be held to highlight the achievements of Women in STEM, to encourage, support and equip young women involved in all aspects of science, technology, engineering, and math, and to setup and launch the Women in STEM Network in Central Vietnam and beyond.

Online registration closes Friday, July 29th

Visit builditvietnam.org/events/women-stem-conference for more information.

REGISTER NOW

Welcome New Team Members



Ms. Thanh Ta

Thanh serves as the business specialist for Arizona State University in Vietnam. She is responsible for accounting, budgeting

and other financial functions. She also supports the management team with management reports, disbursement of funds and the resolution of budget concerns.

Thanh received her Bachelor of Business Administration in Finance and Accounting from International University, Vietnam National University, Ho Chi Minh City. Prior to joining ASU, Thanh has worked and coordinated with multicultural teams from Mazars and Booking.com in Vietnam. She enjoys travelling, volunteering and cooking.



Ms. Khandle Hedrick

Khandle is the new coordinator for global partnership for GOEE. She will be focusing on HEEAP as well

as other global engagement initiatives managed by GOEE.

Khandle has been managing programs in universities, corporations and organizations at the local, national and international levels for the past 10 years. Previously, she worked with Thunderbird School of Global Management, where she was responsible for the management and implementation of a new extended education initiative in Santiago, Chile, made possible by a multi-year grant provided by the mining company Freeport-McMoRan. In addition to assisting in the development and implementation of long-term strategic goals, operational plans, program evaluation and improvement, Khandle also developed vital partnerships with businesses, educational institutions, NGOs and government leaders that further enhanced the reach and success of the program.

Khandle is a recently returned Arizona native with a passion for education. She holds a Bachelor of International Business from Pepperdine University, and has a background in nonprofit management and entrepreneurship.



Ms. Dung Le

Dung is the program coordinator for BUILD-IT in Vietnam. She is based out of Ho Chi Minh City, Vietnam where she serves as

support to the local operations.

She is joining the team with more than five years of work experience in education. Most recently she worked for RMIT University in Vietnam, as senior officer in the human resources department where she was known for her energetic and cooperative attitude and an ability to successfully manage multiple projects.

Dung holds a Bachelor of Art in English Linguistics and Literature from Ho Chi Minh University of Pedagogy and received her master's degree in Teaching English to Speakers of Other Languages from Victoria University, Australia.



Ms. Tam Ngo

Tam serves as our Vietnam-based coordinator responsible for day-to-day support of HEEAP, including stakeholder

communication and coordination, implementation of program activities, event planning and implementation of training as well as workshop activities.

Tam holds a Bachelor of International Business Administration from Foreign Trade University in Ho Chi Minh City and received her Master of Laws in International Trade and Commercial Law in the UK. She is a competent writer and has experience in both quantitative and qualitative research methods, including critical discourse analysis and ethnography. Prior to joining ASU, Tam has worked for several NGOs in different fields, such as corporate social responsibility programs, rural development and trade promotion.