Seven-minute Motivators: Innovations in Curricular, Campus and Program Design

Brent White, University of Arizona
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Global Presence

The UA will provide access to high-quality international education to those who otherwise lack access with 20 Micro-campuses and 10,000 global students by 2025.
Large Scale Collaborative Dual Degree 3+1 Program
Northern Arizona University & Chongqing University of Posts and Telecommunications

Daniel Palm
Associate Vice President for Global Initiatives and Executive Director of the Center for International Education
• NAU currently has 450 Chinese students enrolled at NAU with over 400 of them being dual degree students (1+2+1, 2+2, 3+1).

• 4+0 Mechanical Engineering dual-degree established in 2013 through a join agreement approved by the Chinese Ministry of Education.
  - **NAU is ABET accredited.**

• Currently nearly 400 students in the program with 32 undergraduates and 17 graduate students enrolled at NAU.

• Four NAU professors are in China for 12 weeks teaching 4 courses per semester.
  - **Six new NAU Mechanical Engineering faculty have been hired within the department to teach within this program.**

• 140 students have come to NAU in AY18/19 alone as part of a 2-4 week language/culture program.

• We continue to look for ways to undertake joint research.
IS 3+1 (4+0) RIGHT FOR YOU?

- **Resource intensive**
  - Resources can be reduced by working with an agency but can create increased complexities.
  - We’ve had a team of two administrators.
    - Financial, academic, program promotion, Chinese tax laws, faculty schedules, etc.

- MOE approved 4+0 programs require a **large time commitment**.
  - One can be established and more can only be established after MOE review.

- Consider **provincial level approval** for dual-degree programs whenever possible.
  - Easier and quicker to establish, decreased resource commitment and can result in larger cohorts coming to campus.
  - No limit to the number of programs.
• We consider the program a great success.  
  -What is your win-win situation for your institution?

• It has been transformative for our Mechanical Engineering program.  
  -Doubled the size of graduate undergraduate class  
  -Professors traveling to and teaching in China

• We are in the process of establishing two more programs in China.
Cesar Flores
Director of International Recruitment Operations
HEEAP Higher Engineering Education Alliance Program

**Supply education and build capacity**
Link STEM education in Vietnam's Higher Education Institutions with Industry needs to generate technology-based growth

**Prepare global-minded engineers**
Who display:
Self-reliance
Creativity
Conflict-resolution
Sound understanding of Ethics, Economics and Business Strategies
Higher Education Innovation in Vietnam

Based on the pillars of institutional policy, quality, curriculum, faculty innovation, and technology, ASU leverages deep and diverse government-industry-academic partners that share a goal of tightly linking 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.

<table>
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<tr>
<th>PHASE 1: FACULTY DEVELOPMENT</th>
<th>PHASE 2: QUALITY ASSURANCE &amp; TECHNOLOGY SOLUTIONS</th>
<th>PHASE 3: CURRICULUM INNOVATION &amp; QUALITY, POLICY &amp; LEADERSHIP</th>
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<tr>
<td>HEEAP (2010-2012) $5 M</td>
<td>VEEC Can Tho 164</td>
<td>VEEC Ho Chi Minh City 350</td>
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<tr>
<td>USAID and Intel funded the initial project</td>
<td>109 awarded Vocational Female Scholarships</td>
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<td>VULII (2013-2015) $2.4 M</td>
<td>911 PhD Fellowships</td>
<td>New Vietnamese Laws allow more autonomy for Higher Education</td>
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<tr>
<td>USAID funded Vocational &amp; University Leadership and Innovation Institute</td>
<td>Faculty Masters Fellowships</td>
<td>109 awarded Vocational Female Scholarships</td>
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<td>INTEL Investment (2012-2018) $7 M</td>
<td>Advancing Women in Engineering</td>
<td>1st Custom Cohort Internet of Things at ASU</td>
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<td>Founding partners</td>
<td></td>
<td>1st Women in STEM Conference in DaNang</td>
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<tr>
<td>ASU</td>
<td>intel</td>
<td>USAID</td>
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Consortium Partners: Academic-Government-Industry

- Adobe
- Autodesk
- Canon
- Chipworks
- Cisco
- Dell
- Intel
- Microsoft
- National Instruments
- Oracle
- Pearson
- Semtech
- Siemens
- Texas Instruments
- Tektronix
- Tekne
- VMware
- Xilinx
- ZTE
4,703
Vietnamese leaders and faculty trained

64
STEM programs for ABET accreditation by 2020

11,000
Students participated to date

39%
Female trainees

100+
Faculty trained in EPICS workshops

200,000
Students to be impacted by 2020

BUILD-IT
Building University-Industry Learning and Development through Innovation and Technology
Oracle Academy Training
Train-the-trainer Java courses in partnership with Oracle Academy

Amazon Web Services Training
Training in industry sponsored applied curriculum in cloud computing technology in partnership with Amazon Web Services

WEPICS¹ Competition
Providing leadership opportunities for women in entrepreneurship and innovation in partnership with Fablab Danang, University of Danang, Danang University of Science and Technology, Evergreen Labs and Microsoft

Institutional Accreditation Series
University partners prepare for international accreditation and recognition as a hallmark of institution and program quality
Innovative Internationalization within a Decentralized Structure: Arizona State University

Shelley Stephenson, Arizona State University
Arizona State University

ASU Design aspiration number 8: Engage Globally

No. 1 public university chosen by international students

Top 10 in the nation for students studying abroad

No. 1 in the U.S. for innovation ahead of Stanford and MIT

ASU engages with people and issues locally, nationally and internationally.

- Open Doors 2018 Report

- Open Doors 2018 Report

- U.S. News & Word Report

#AIEA2018 | www.aieaworld.org
ASU innovation in the global space

Online education
- Global Freshman Academy
- Education for Humanity

Education abroad
- Global Intensive Experience
- Planning Grant
- ASU OLLI Corps

Research
- ASU International Development
ASU organizational structure in the global space
Decentralization benefits & challenges

Benefits
- Venture capital model
- Freedom to innovate
- Nimbleness
- Localized funding
- Allocation of resources
- Grassroots-level support

Challenges
- Silos/communication
  - Lack of connections, risks
- Fragmented or partial strategy
- Lack of continuity & common purpose
- Inefficiency
- Duplicated efforts
Supporting innovation with integration

Mission:
Advance coordination while supporting global entrepreneurial innovation
  • Design and implement an integrated system of resources, infrastructure, and strategic planning
  • Bring coherence to global engagement within the existing system of “distributed decision-making”

Collaboration & connection rather than command & control
Evolution of structure