



REFRAME

Engineering And
Humanity Week

REWIND: A Look Back at
Engineering & Humanity Week 2011

Foreword

Welcome to our special report on Engineering & Humanity Week, April 11-15, 2011

The inaugural Engineering & Humanity Week took place at Southern Methodist University (SMU) in Dallas, Texas, hosted by the Hunt Institute for Engineering & Humanity. The week of events was filled with thought leaders and attendees convening in the Living Village and the beautiful surroundings of the SMU campus.

The theme for 2011 was “Redefining What’s Possible.” The week focused on the topics of business opportunities in the developing world, the co-dependence of water and energy, and the lack of affordable shelter for billions. The take-away from all discussions was how innovative people can be in seemingly impossible situations.

In his keynote, Richard Kauffman, Board Chairman for Levi Strauss, a company developing “waterless” jean technology, spoke about how multinationals could utilize technology to better manage precious resources.

Despite the political risk in many developing countries, TechnoServe CEO Bruce McNamer discussed how new business opportunities in these economies are not only possible but profitable. McNamer recounted a story of organizing the poultry industry in Mozambique and creating the whole supply chain from a small and disjointed industry in 2005. Today it is a \$160 million business and the industry has created 90,000 jobs.

Globally, there are as many independent conversations about clean water scarcity as there are discussions about the rising demand for energy, yet they are rarely discussed in tandem. Moderator Jeff Ball, Environment Editor for the Wall Street Journal, masterfully united the two issues. While he highlighted the challenges that new sources of energy face, the panel was unanimous in their message; energy was a major challenge for water use, but also a key ingredient for its solution.

How do you solve the housing problem for 3 billion people who live on two dollars or less per day? Kenyan architect Ronald Omyonga said to think about the solution holistically and not to design for “the poor.” Rafael Smith, an industrial designer and entrepreneur, designed a shelter for earthquake victims in Haiti. The

design process took him into a tent city in Haiti to seek input from the populace, allowing him to build a shelter that was culturally appropriate.

The culminating event was the presentation of the Visionary Award to the renowned inventor, Dean Kamen, for his creation of a water filtration system for use in the developing world. Kamen’s address capped a magical evening at the Audubon Center, where he challenged the students – the next generation of leaders and problem solvers – to reject the status quo and direct their talents and energies towards the billions of humanity in desperate need.

Perhaps the biggest surprise of the week was the popularity of the Living Village with the students and community at large. Students and volunteers built a dozen disaster relief shelters – some took just a few hours to complete and other shelters took days. The technology ranged from sand bags to compressed plastic refuse and shipping containers. Students spent the night in the shelters and blogged about the experience.

The Living Village was dedicated to the late Sargent Shriver, founding director and architect of the Peace Corps. On behalf of his father, Anthony Kennedy Shriver gave a rousing speech, inspiring the audience to embrace love and use their hearts in problem solving.

We are pleased that the community embraced the first Engineering & Humanity Week. Because of the support, we are now busy working on the second Engineering & Humanity Week, which takes place April 16-20, 2012, in Dallas. A big thank you to our partners and sponsors for making this week possible.

We look forward to welcoming you next spring!



Stephanie Hunt
Founder,
Engineering & Humanity Week

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Overview: Media

Quotes

"[Ethical Engineering]...you can definitely see it at SMU, which has created the Hunter & Stephanie Hunt Institute for Engineering and Humanity. Early in April, the institute will host 'Engineering & Humanity Week,' in part to honor the work of Dean Kamen, who has turned much of his entrepreneurial and inventive talent to projects aimed at aiding the 'bottom billion.'

...Congratulations to both Southern Methodist and Kamen." - **The New York Times, March 30, 2011**

"Their slogan is change the conversation to action...So taking these ideas that are always looming in engineers' minds and actually putting forth...how can we actually change what's going on in the third world and put... those innovative mindsets to good use for people who need just the basics: water and shelter." - **Travis Miller (Lyle Engineering Student)**

"He [Harvey Lacey] says that taking the knowledge he has gained at Engineering & Humanity Week and expanding it is what everything he has worked for is about. 'Why can't we make change?' Lacey said. 'Why can't we make a difference?'" - **SMU Daily Campus, April 15, 2011**

"What better way to draw attention and awareness, than to pitch a United Nations refugee tent on the SMU campus along with a dozen other disaster relief structures turned into housing, a commissary and shops." - **Dallas Morning News, March 12, 2011**

“By the time we reach 2020 there is going to be about 1.7 billion people living in slums. So, we would like to affect change. We would like to inspire the next generation of engineer, entrepreneur, anthropologist, lawyer; anyone who can help in eradicating poverty. We would like to be a part of collaborating on helping solve issues that they face day to day, like clean water.”

- **Stephanie Hunt on Voice of America, April 26, 2011**

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Engineering And Humanity Week

MOST STORIES FROM SINGLE MEDIA SOURCE

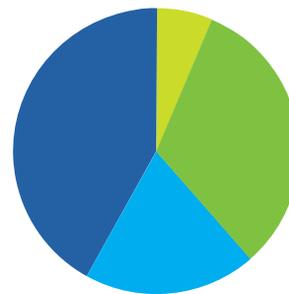
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The Dallas Morning News and SMU's The Daily Campus

MEDIA STORIES

31

NEWS STORIES



31.0 Total

Local 41.9%

The Dallas Morning News
Dallas Observer
KDAF (Ch. 33 - Dallas)
KERA 90.1 (NPR - Dallas)
KXAS (NBC - Dallas)
WFAA (ABC - Dallas)
NeighborsGo.com

National 19.4%

The New York Times
USA Today
Voice of America
MSNBC.com
AOL News
Yahoo! News

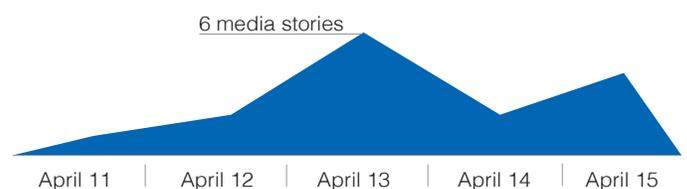
SMU 32.2%

The Daily Campus
The Daily Mustang
SMU.edu

Other 6.5%

Greensource DFW
Living Village Blog

DAY WITH MOST MEDIA COVERAGE





One of the many connections established during E&H week: Ronald Omyonga and Peter Thum chat about their shared passion of bringing lasting solutions for limited resources around the world.



Celebrating the many diverse cultures represented at the Living Village.



A diverse group of expertise and experience working toward changing conversation to action in the Living Village.



SMU student volunteers constructing Cal-Earth and LiteYurt shelters.



Anthony Kennedy Shriver of Best Buddies cutting the ribbon during the opening ceremony.

Experience: Living Village

Living in the Living Village

“Overall, this has been one of the most rewarding experiences I’ve ever had. When you spend days working outside, connecting with people and building something from the ground up, it’s utterly fulfilling when you stand back and witness the fruits of your labor. If there are engineering jobs remotely similar to this, please sign me up now!” - **Jonathan, Student Entry: Living Village Blog, April 13, 2011**

“Even though I woke up every morning feeling like I had lost a fight the night before, I was dry, and clean, and warm(ish). Comparing my shelter to some of the others in the village, I was spoiled!” - **Taylor, Student Entry: Living Village Blog, April 18, 2011**

“In summary, here is a list of things that I learned last night: the ground is hard and cold, I hate grackles, electricians get up early, bugs are everywhere, AND guitars are pleasant to fall asleep to.” - **Ryan, Student Entry: Living Village Blog, April 11, 2011**

“Students are field-testing some of the latest in emergency shelter technology, cooking their meals outside, and carrying their own water in an operation called the Living Village.” - **Dallas Observer, April 13, 2011**

“The biggest thing is I’m getting a perspective about what’s going on in different parts of the world. Whenever you’re an SMU student, it is easy to get caught up in the city and kind of your own little bubble, your own little world. Whenever you are an engineer there are so many problems you are capable of solving.” - **Carson, Lyle Engineering Student**

“[Harvey] Lacey demonstrated just how his open-source design works, tossing a few bundles of plastic shopping bags into his hand-powered bag compactor, and letting a volunteer turn the big steering wheel to punch them into shape. ‘People say this is terribly labor intensive,’ Lacey said. ‘There are parts of the world where work is considered opportunity.’” - **Dallas Observer, April 13, 2011**

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STUDENT INHABITANTS

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MARKET RETAILERS AND TECHNOLOGY DEMONSTRATIONS

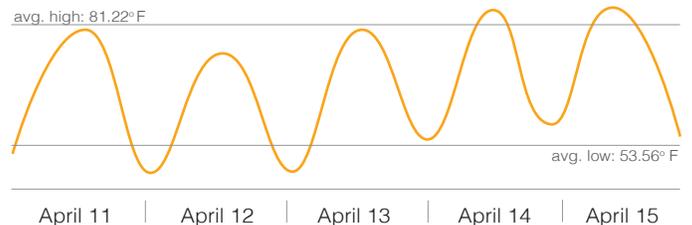
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Awamaki, Walleska, The African In"Knit"iative, Worn, Akola Project, Hope 4 Refugees, Heavenly Treasures, KLI - KLA Market, Mothers for All, Sustainable Farming, HabiHut (GE), Chevy Volt, Bike Generator, Solar Cooker, Clean Water Walk, Ready Set Solar

DURATION OF LIVING VILLAGE

05 days and 04 nights

DAILY TEMPERATURES



EASE OF CONSTRUCTION



Events: Speakers and Panelists

SPEAKERS AND PANELISTS:

Maya Ajmera	Richard L. Kauffman
Jeffrey Ball	Bruce McNamer
David Chard	Malcolm S. Morris
Vincent Cochetel, <i>France</i>	John Mullins
James "Chip" H. Cottrell Jr.	Ronald Omyonga, <i>Kenya</i>
Robert "Bob" Freling	Geoffrey Orsak
Jeff Fulgham	Sergio Palleroni, <i>Argentina</i>
Daniel Gross	Alejandro Rodal, <i>Mexico</i>
Cheryl Hall	Anthony Kennedy Shriver
Mayra Hernandez, <i>Mexico</i>	Ambassador John Simon
Hunter Hunt	Rafael Smith
Konstantin Kakaes	Peter Thum
Dean Kamen	R. Gerald Turner

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Engineering And Humanity Week

SPEAKERS AND PANELISTS

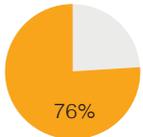
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EVENTS

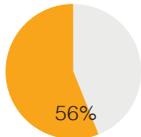
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Luncheons and Panels, Living Village Ribbon Cutting, Films and Music, Student Debate, Student Design Competition, Awards Dinner, Feedback Session, Miscellaneous

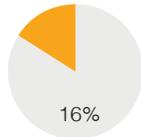
SPEAKER EXPERIENCE AND EXPERTISE



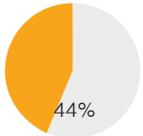
Global Presence



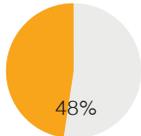
Developing World



Disaster Relief

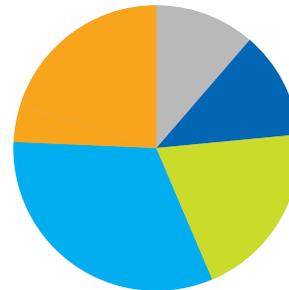


Poverty/Financial Development



Resources (Energy, Water, Shelter)

SPEAKER CATEGORIES



- 6.0 Nonprofit/NGO
- 8.0 Business
- 5.0 Academia
- 3.0 Architecture
- 3.0 Journalism

SPEAKER ORIGINS





Luncheon & Panel Discussion : Clean Water & Energy Consumption: On a Collision Course?



Keynote Luncheon: Navigating Business Opportunities in Emerging Markets.



Daniel Gross of WorldHaus gives a solar demonstration.



Dean Kamen and Dean Orsak with the winners of the Engineering & Humanity Week Design Competition.



The Living Village displayed both disaster and low-cost housing solutions. Pictured above are the Cal Earth Shelter, Hexa Yurt, and Shelter Box Tent.



Harvey Lacey, creator of the Ubuntu Blox/ Plastic Block House, doing a live demonstration of each block made of compressed plastic bags.

Overview: Participation

Participant Survey Responses

“It showed me how I could help with global poverty in more ways than just donating money.”

“I’ve been on campus for 5 years and had never seen or been a part of anything like it. I liked the reasoning for it and what it hoped to achieve.”

“The week’s efforts matched my own passions. Through the events provided, I grew and encouraged others to grow as well.”

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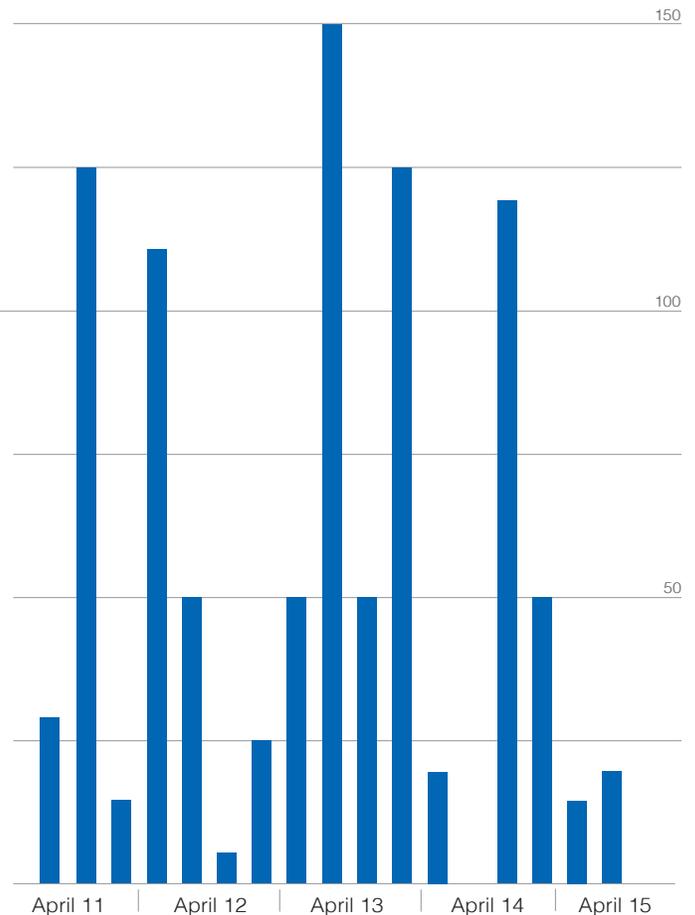
Engineering And Humanity Week

RECORDED EVENT ATTENDANCE LARGEST AUDIENCE

910 **150**

Clean Water & Energy Luncheon and Panel.*

ATTENDANCE



*Attendance figures are based on estimates of each event.

Events with over 100 attendants:
 Panel: Clean Water & Energy Consumption
 Living Village Dedication Ceremony and Ribbon Cutting
 Awards Dinner and Music at the Audubon Center
 Panel: The Real Extreme Home Makeover
 Keynote Luncheon: Navigating Business Opportunities in Emerging Markets

Events with under 100 attendants:
 Clean Water Walk
 Student Debate: The Effects of Nuclear Power on our Global Food, Water, and Shelter
 Lecture: Innovation at the Bottom of the Pyramid
 Music and Film Celebration: Dallas Caerata, “Bag It” Documentary
 Music and Film Celebration: “The New Recruits”
 Music and Film Celebration: Joe Dowdle, “American Idealist”
 What Now? Feedback Session
 John Mullins Book Signing



Harvey Lacey sharing his thoughts during the Student Debate.



The market tent in the Living Village.



Ursuline Girls participating in the Clean Water Walk at the Living Village.

Impact: Testimonials

"I have travelled around the world, exposed to many low cost housing options. I thought that the I.A.D.D.I.C. house that uses two five gallon buckets, mixed together, and results in a house in one day is the most amazing technology I have ever seen built in my life. No one in my circle knew about I.A.D.D.I.C. Engineering & Humanity Week allowed us to make connections with students, alumni, entrepreneurs, and large companies all in one place."

- Malcolm Morris, Living Water International

"I was a sponsor for two reasons. One, I actually believe in the cause. Two, I was interested in being in the shelter technology business, but I needed a platform to meet the right people. Engineering & Humanity Week enabled me to meet all of those people at one location."

- Anurag Jain, Entrepreneur

"We are looking at increasing our geographic scope to other countries like Kenya, based on some of the discussions that we had with other presenters and attendees."

- Daniel Gross, Worldhaus

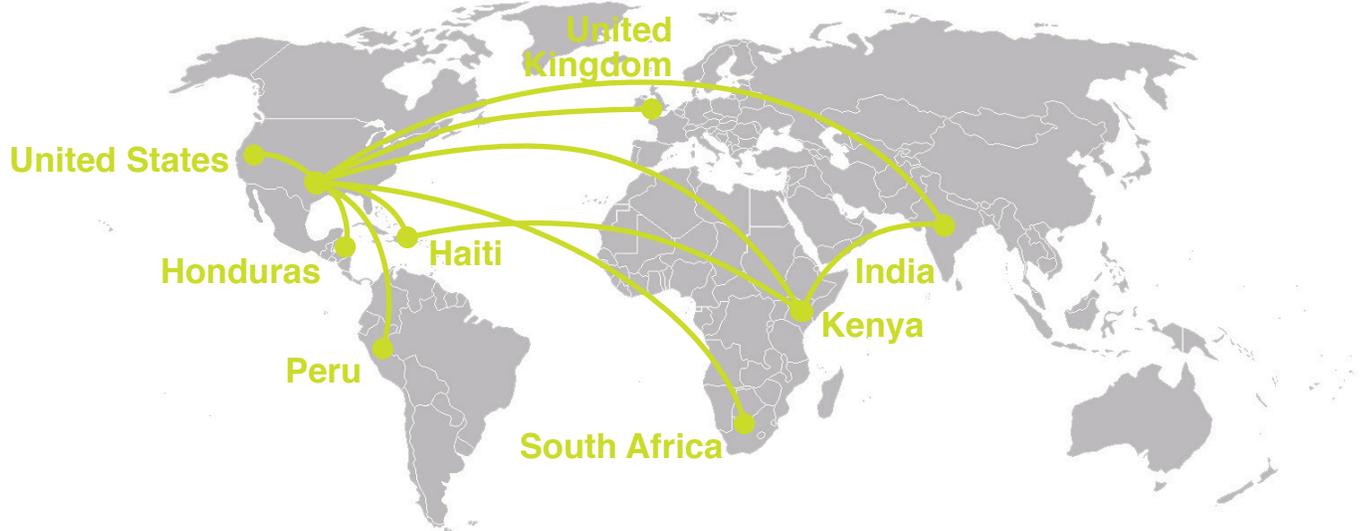
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ZeeWeed and HabiHut collaborating on a student shelter and water kiosk in the Living Village.

GEOGRAPHIC CONNECTIONS



Feedback

What We Do Next...

- Construct: a Living Village at different locations. This could include at the Texas State Fair, or SMU Homecoming.
- Expand: partner with other universities, recreating the Living Village on 9 other campuses in the US & abroad with live video streaming between campuses. Host students at SMU post event.
- Design Competition: invite other universities to compete; host finals at SMU; extend to a semester-long project.
- Awards: create an annual prize for best technologies; recruit international students to SMU
- Target incoming students: become involved with other university programs such as Mustang Corral and Arrow.
- Continue: website and communications with a monthly newsletter, keep website fresh, and update the E&H main website.
- Promote Connections: translate conversations into action, create a feedback loop, and promote connections made at E&H Week.

What We Can Improve...

- Include: both morning and evening sessions so more students can attend regardless of their class schedule.
- Include Students: in planning; include international students; make registration and ticket processes for luncheons and panels simpler, easier to understand.
- Engage: other local colleges and high schools through programs like Model UN.
- Entice: local professional involvement by offering Continuing Education Credits.
- Extend Media Reach: target national media.
- Technologies: larger-scale technologies, engineering-related technologies, and student-developed technologies
- Highlight: the Student Design Competition speakers and moderators: better preparation, submit questions to the panelists beforehand, and earlier request of attendance.

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Engineering And Humanity Week

POST EVENT SURVEY RESULTS

DID E&H WEEK CHANGE THE WAY YOU THOUGHT ABOUT GLOBAL POVERTY?

53%

Yes

WOULD YOU PARTICIPATE IN A SIMILAR EVENT IN THE FUTURE?

93%

Yes

RATE YOUR EXPERIENCE AT ENGINEERING & HUMANITY WEEK

5 EXCELLENT



4

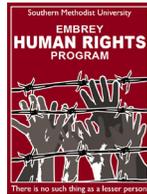
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2

1 POOR

“It gave the students an opportunity to get out and really think about how we live in America, and how people live in the rest of the world.”

- Malcolm Morris



buildingcommunity WORKSHOP



PERKINS + WILL

Neiman Marcus



Solar Electric Light Fund





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