Engineers Week—Dean’s Message

At times, we get caught up in the matter-of-fact world where a task is a task, a job is a job, and things feel like rote. It is during these moments when I have to catch myself and realize where I come from, that life is so much more than this feeling I may have in the moment.

What these student leaders demonstrated was how to celebrate themselves, their professors, and the College of Engineering as a vehicle for their future paths. How very special.

As I’ve often said since signing up as interim dean of the college, our most precious resource is our students. Our students, professors, staff, alumni, and industrial partners have one thing in common -- a commitment to the value of engineering in our society, and to the success of our students as tomorrow’s leaders. And their efforts during Engineers Week, only emphasized that our students are our most important community members.

I look forward to many enjoyable experiences at the college where we continue to improve the environment for our students and to support them in their enthusiasm and goals for themselves.

Mumtaz Usmen
I THINK, therefore I AM an ENGINEER. Or as Descartes would have originally said it, “Cogito ergo sum” of $1/n$ times $x_i$ as $i$ goes from 1 to $n$. While there was some humor in my last sentence there is some seriousness built in. Let me explain. The equation I slipped into the famous quote my Descartes has a special meaning to me personally and as an engineering student.

We learned this concept early on in our academic studies when we started to determine the mean of a set of numbers by adding up the set and dividing by the amount of numbers within that set. This concept was easily grasped by us at 9 or 10 years old. In my freshman year of physics lab, I was formally introduced to the summation formula that I listed earlier and was quickly realizing that I was on a learning adventure to explain the world around us that is taken for granted every day and was gaining much more respect for the founding thinkers and scientists that spent lifetimes discovering these basic building blocks that provide the foundation of the technology that is relevant in our pragmatic advancement seen today.

In May, I celebrate the end of my first path in this process by graduating with my BS in Electrical Engineering. I say that is my first path because we never stop learning and owe it to ourselves to keep our knowledge current and from getting stale. We all witness the speed in which change is happening and we must strive to stay ahead of the game in order to apply our skills to the forefront of discoveries and breakthroughs. My story is unique, in a way, for I am considered a non-traditional student. This means that I chose to forego going to college out of high school and enter the workforce. I was an auto-worker for 9 years at Ford Motor Company and was able to take advantage of an educational buy-out program they had to offer. I must say that while this decision has set me back as far as my earning potential goes it has been the most rewarding challenge that I have encountered to date. I have just turned 36 years old and I have been studying with a group of students whose ages range from 10 -15 years younger than me. This was a personal challenge since I felt as if I was out of place in the beginning. I have since made many friends at WSU and thank all of them for their support and camaraderie. My additional challenges lie in the fact that I have four young children and I have to sustain a full-time job in order to support them during my career change. I am currently hold a co-op position at the U.S. Army Tank Automotive Research, Development, and Engineering Center (TARDEC) and will hire on as a permanent engineer upon graduation this May. SUCCESS! I will continue my academic plan with a graduate degree in Defense Engineering which is a new program ramping up between TARDEC and WSU and is the first of its kind in the United States and second in the world!

During my academic journey here at WSU, I have developed the confidence needed to continue my career with the Army and have been able to be a part of a community of engineering students and faculty that I will remember throughout my engineering career. In addition, I am an IEEE student member and had my senior project chosen to be put on display in the College of Engineering showcase be fellow IEEE members and representatives. I have also been a student blogger for WSU mostly representing engineering but also blogging about my experiences here on campus. Feel free to comment at http://blogs.wayne.edu/aaron/ and let me know what you are thinking. In my spare time I enjoy robotics and most of all fishing. I never pass up a reason to hit the lake and drop a line!

Thanks for reading and GOOD LUCK to all in all that you do!
Over the last few months, some students in the College of Engineering have been busy working on a Design Contest set up by New Mexico State University. The Environmental Design Contest is a special event that works to combine education and industry to come up with innovative solutions to environmental issues. The contest has been held on an annual basis since 1991, and it has proved to be very successful in bringing hundreds of college students together in working towards improving the environment.

The students work in teams to come up with a solution to a problem along with fully tested and scaled plans that are presented to a panel of environmental professionals. The whole competition is made up of four presentations – a written, oral, poster, and bench-scale model. The contest also emphasizes safety during all testing and presentations. Not only is the competition a fantastic way to help the environment, but it presents students with an opportunity to network, work in a team, and socialize at events like the live performance of Asper Kourt this year (a New Mexican band) and the Awards Banquet.

Wayne State’s first ever team to compete in this design competition is currently made up of 5 students along with one faculty member – Renee Thomas, Shawn Ingram, Derek Brancheau, Sarah Philips, William Lake and Dr. Shawn McElmurry. The team has been hard at work to design and build a portable siphoning unit to concentrate pond water bacteria into more manageable, portable sample sizes.

The whole process involves collaboration between people from the chemical engineering and biology departments, bringing different majors together for a common goal. The team is trying to develop a method to concentrate bacteria from 10L of pond water to a 10mL portable sample. The bacteria being worked with is Pseudomonas Aeruginosa, which is actually very common in the world around us. It is found to be the second most responsible for infections in hospitals and isn’t very susceptible to antibiotics. WSU’s team is creating an affinity column technique using a product called Dyna Beads to be bound by an anti-body that is specific to this bacteria, using an activated tosyl-group on their surface. Then, they will be placing the beads in a column very similar to that which is used for liquid chromatography. After passing the pond water through the column so that the bacteria attach to the beads’ surface, an elution buffer will be used to strip the bacteria from the beads. Overall, this is a very innovative process, as these beads haven’t yet been used in this manner.

This year’s team is the first to enter this competition from Wayne State, and the members of the team are new in working with bacteria. Still, they are very determined and excited to represent Wayne State University in New Mexico at the end of March. Let’s wish them the best as they go out for the competition this year!
WHAT HAPPENED TO FACEBOOK?

By: Frank Addo

Social networking has become very prevalent in today’s society. Due to success of sites such as Facebook, we are just one click away from interacting with the entire world. I first got a Facebook account when it was still in its baby stages back in late 2006. I logged on to the site almost every day and had a blast interacting with friends and making new ones. With the addition of tons of applications, my experience became more enjoyable, but as time went by I started to get a little disappointed.

Not only did I throw away countless hours of my life by chatting, reading posts, and taking pointless quizzes, I also noticed that the site was becoming a mockery of something initially created for networking and exchanging ideas with other individuals. The Facebook that I once knew has since become a place of constant gossip, personal lives revealed, and teens gone wild (profane language, questionable pictures and videos, etc.). We need to understand that whatever information we upload, post, or communicate can be either beneficial or detrimental for us in the long run.

It should come as no surprise that employers nowadays check out their potential employees’ Facebook profiles to learn a little more about their characteristics and attributes. Let’s be cautious of the things we do and say on this site (and many others) and try to revive it and make it a real social networking community again.
And the winner is: Global Positioning System

**Newsletter Survey Results**

Thank you all who participated in the survey. We are looking for survey questions so shoot me an email (Vanda - ametlli@gmail.com) if you have a suggestion.

Some fill-in inventions in the last 50 years were:

The internet, coffee machine, computers and furbies!

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**ESFB Newsletter Name Competition: Suggest a name!!!!!!**

It’s February and we are still being called the ESFB Newsletter. There is just nothing catchy to that name. :( The ESFB Newsletter staff is seeking suggestions for a name. In the past a similar version of this newsletter that was distributed in hard-copy was called the “Wayne Engineer”. Since, the launch of this newsletter in September 2009, I have received the following suggestions: The Mosquito, BEST Newsletter (Brilliant engineers Sharing Thoughts), “Engineering Sidekick” and “Engineer’s Code”.

We NEED more suggestions. Submit your suggestions to ametlli@gmail.com by March 31st. The engineering body will then vote on a name and the winner will get a $5 gift card for lunch at LaPita.
My friend Gaby and I always like to plan events together. Last year, Gaby had the fabulous idea of hosting a Mardi Gras Party for the engineering body. Of course, I jumped in at this idea because well I can never say no to planning for a party! The most exciting part was that our celebration would fall under “National Engineers Week”. This special week is all about promoting and celebrating engineering. As future engineers and actual engineers we forget to take time and celebrate our accomplishments with others with the hopes that these accomplishments will inspire younger generations. The 1st Annual Mardi Gras party hosted by IIE and SHPE was a success. It was an inspiration for me to make Engineers Week something bigger in the College of Engineering. The only way I saw this working was to have as much collaboration from engineering student organizations. This was also a reason why I ran for ESFB president, to engage student organizations in sponsoring activities for students and faculty.

The kick-off meeting started for this year’s celebration started in October. As no one volunteered to be the Chair for E-Week, the planning was rushed. The end result thought was great. A combination of great support from the committee members and feedback from student organizations made it happen and ESFB’s Faculty Adviser, Dean Thompkins, made it happen.

Throughout the fun and educational activities throughout the week, they all had one common purpose which is “unity” among the engineering body. Often, we hear the excuse “It’s hard to have activities at WSU because it’s a commuter school”. At the same time, I hear many that say, there is not much the College offers in terms of social events. We are all responsible for creating a community in the College. I know sometimes with school, work and families it becomes hard to make social activities a priority but we are attending college only once and there is no reason not to make the best of it. Next time you get an email from a student organization or me, give it 10 seconds of your time before you trash it, it might be worthwhile.
Faculty Appreciation Day

Engineers Week kicked off with “Faculty Appreciation Day”, where students stopped by faculty offices in the Engineering Building, Engineering Technology, Biomedical Engineering and Manufacturing Building to give students personalized thank you cards submitted by students and a thank you card from the “Engineering Student Faculty Board”. We also offered cookies and donuts to them! In addition, we requested pictures. Many faculty members seemed to be “embarrassed” that their office might not look “organized” enough for a picture. Overall, we had great feedback and welcoming faculty members who felt appreciated!
Mardi Gras Celebration

Mardi Gras was celebrated Engineering Style in the “Engineering Development Center”. IIE and SHPE offered great music, beads, pizza and delicious pazcki!

Engineering Exploration

IEEE hosted a Soldering Workshop on Thursday on behalf of “Engineering Exploration Theme”. After the workshop, students also heard senior capstone projects by Electrical & Computer Engineering Students.

Jeopardy—Boys vs. Girls

SHPE & IEEE hosted a Jeopardy Competition on Friday for E-Week. The girls were victorious.
SAVE THE DATE

EngiNerds 3.0

April 12-16, 2010
GIVE US A TITLE!

YOUR NAME COULD BE HERE!

Engineering Student Faculty Board

Newsletter  Staff Members

Rebecca Thoppil  Daniel Sobczynki  Frank Addo
Vrushen Pathak  Daniel Jacobovitz  Vanda Ametlli
Sohaib Gilani  Touhou Xiong  Ashley Mitchell
Frank Addo  Fouad Mohammad  John Herbon

All students, faculty & staff are encouraged to submit articles

SUBMIT YOUR ARTICLE!

To: ESFB@eng.wayne.edu

College of Engineering Upcoming Events

IEEE General Body Meeting- March 9th
Cass Tech First Robotics- March 12th and 13th
FIRST Robotics Regional Competition—18th,19th and 20th
Concrete Canoe Competition— March 26th- March 28th
April 16th- Honors Convocation

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- Facebook
www.eng.wayne.edu/~esfb

ESFB
MEETINGS
EVERY
WEDNESDAY

Stop by 1503 EDC to purchase

$2 Yellow or Green to support WSU Baseball team

http://wsuathletics.com/

Matthaei
WAYNE STATE
MANIACS
So you’re graduating ...

What is AfterCollege?

“AfterCollege is an online professional platform that connects college students, alumni and employers through customized career networks at colleges and professional organizations across the country.”

How can you Join?

Each engineering student organization has a specialized AfterCollege page which you can find by visiting, www.eng.wayne.edu/studentorgs.

The website offers job search for full time and internships. In addition, it gives away many engineering scholarships!!!