



The Road Less Traveled by Kit McCallum

How often we must bear the challenges of life;
The endless roller coaster between happiness and sorrow;
The constant ups and downs of daily strife.
And always the question remainswhy?

Life is not an easy road for most;
It twists and turns with many forks in the road,
Although always, and inevitably, we are given a choice ...

Do we turn to the right ... or the left?
Do we take the high road ... or the low road?
Do we take the easy path ... or the difficult one?

Decisions are not easy for those struggling for direction ...
And sometimes the many choices and signs become
overwhelming.

While standing at a crossroads in life,
The urge is to take the most comfortable path;
The road with least resistance ...
The shortest or most traveled route.

And yet, if we've been down that comfortable road before;
Have gleaned its lessons in life, and learned from our
experiences;

Do we yet again follow the known?
Or does our destiny lie in another direction?

The fear of the road less traveled is tangible and all too real;
It manifests itself in many ways,
And tends to cloud the issues that might otherwise be clear.

It is in these times of confusion,
That we must seek peace and solitude;

Time to contemplate on our life,
Our experiences and our choices past;
Time to look back, and reflect on what we have learned
Without fear or confusion.

For only each of us knows our own personal thoughts;
Our unique past and personal history;
The experiences that brought us to the crossroads we now face.

We can always learn a small degree from others experiences,
And yet ... no one person can walk in our shoes,
Others know not, the trials and tribulations faced in private ...

For each is individual ... unique ... and personal.

And that is why ... while standing at a crossroads,
Only "we" can formulate the decision for ourselves;
The true direction that lies within;
The choices we must deliberate on with clarity and wisdom.

For it is only through personal reflection,
That we can now choose our destiny;
... Our next adventure;
... And the future we will embrace.



For the decisions yet to be made, remember, "Your impact is greater than you know"... Ms. Johnson
Manager, Student Development & Support, RISE & WIE, College of Engineering

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AN INTERNATIONAL PERSPECTIVE BY JOANNA ADADEVOH, JUNIOR CHEG

A New College Experience

College in the U.S. has definitely been rewarding and challenging for me as an international student. Although I was fluent in English before I came to the University of Delaware, I still had to adjust to the American culture. I had to become accustomed to the teaching styles of professors to truly excel in class. For example, I had to get used to my professors teaching off PowerPoint slides rather than from the blackboard. I also had to learn to work in groups for class projects – something I was not too familiar with. Aside from these, there were other things I had to acquaint myself with such as food, living in a residence hall, and interacting with students from diverse backgrounds.



With time and by meeting people and making friends, I became accustomed to the way of life in Delaware. I came out of my familiar zone and joined registered student organizations such as the National Society of Black Engineers (NSBE), UD Gospel Choir, and Intersivity Christian Fellowship. I also became a Diversity Enrichment Leader and a Resident Assistant. By engaging in these activities, I gained skills such as leadership and time management that will be very useful in any discipline I might find myself in the future.

Participation in RISE

The RISE Program was a wonderful resource in helping me come out of my niche. Having personal sessions with Ms. Johnson my freshman year, group sessions with my classmates and upper classmen, and monthly workshops, I learned more about the UD campus and became willing to try new things, join student organizations and even take up leadership roles in such organizations. I learned to balance extracurricular activities with my academics. The awesome thing about the RISE Program is that I got to meet engineering students who were going through the same or similar situation as me. I had the opportunity to learn from others' mistakes and so improve my experience at UD. I am really grateful for the RISE Program and for the other organizations and programs I have had the privilege of being a part of.

A MEMORABLE MULTI-ETHNIC DEVELOPMENT CONFERENCE**BY CYNELSA BRODERICK, SENIOR ENEG**

March 5th, 2011 marked the 24th Anniversary of the Career Services Center's Annual Multi-Ethnic Career Development Conference (MECDC). As a senior in the RISE Program, this was my fourth time attending the conference. I must admit that the first time I attended was in hope of winning the grand prize, an iPod-Touch. However, by the time I made my way through my first MECDC, I found all that I learned to be so beneficial. I soon knew that I would continue to take advantage of everything the conference offered me. This year, I volunteered on the Student Leadership Board to help promote the event to students and provide feedback to the Career Services Center (CSC) planners. Although this was my fourth time around, I was still able to network with major employers I was only vaguely familiar with, get advice from UD Alumni about furthering one's education or marketing yourself in the transition from school to the work force, and be inspired by an extremely motivating talk from the conference's keynote speaker. All who attended the MECDC this year witnessed the powerful words in Olympic-medalist, Dominique Dawes's keynote address. Dawes challenged the audience to "aspire to inspire" – This is her motto, she added,



(from left to right): Cynelsa, Keynote Speaker Dominique Dawes and Clyde Broderick

and said that inspiring others is what she enjoyed doing the most. The wise words given by our keynote speaker did not end there. She preached that everyone should know what they are motivated by, and to not let that motivation be based on something that can easily be taken from you, such as money. In closing, she laid emphasis on a list of important principles that make you who you are. For the remainder of the day, I got a chance to hear from several UD Alumni through two Panel Workshops. I found this valuable because these alumni were once students on our campus, and are now successful career men and women. Although some things have changed since they were here, the panelists had good recommendations for students who needed

direction in managing their way through college. Topics that were covered were "Preparing for Graduate School Success", "Finding Careers Outside of Your Major: Marketing Your Degree", "Benefits of Networking" and "Finding Jobs in a Tough Economy".

I highly recommend this conference to all continuing students here at UD. It is a full day of free knowledge and networking, a catered lunch, and a chance to win great prizes. It is designed to keep you on the right track in college while preparing you for the future. Take it from me: I did not win an iPod-Touch during my first attendance, or an iPad at my last, but I would still attend this event any day, rain or shine.



Members of the MECDC Student Leadership Board, Career Services Center and RISE

INTERVIEW WITH ARIEL ROACH*Conducted by Lindsay Rennie***Q. Tell us about yourself**

As in RISE tradition: My name is Ariel Roach and I am a senior mechanical engineering major from Harrisburg, Pennsylvania.

Q. Why did you decide on a Mechanical Engineering major?

When I first started at UD, I was engineering undecided. By the end of my fall semester I chose Mechanical Engineering because it is one of the few majors that span everything affecting the human race today: medical, robotics, sustainable energy, aerospace, and so on. I especially liked the opportunities in the biomedical field and in bioengineering. Also, it's one major where you work with all of the other disciplines so you are constantly learning something new.

Q. How did you get to know about the RISE Program?

My mother signed me up when I applied to the University of Delaware.

Q. How has your experience with the RISE Program been?

My experience with the RISE Program has been really great. SEP was one of the best programs to join because I got a heads up on campus, how to manage time between classes and having fun. Also a close friendship was made between SEP and RISE members because we always had someone to count on when doing work. RISE was also great in helping me finance my trip to Australia and taking classes during winter session. The free tutoring was a life saver.

Q. Who has made the most significant impact on your college career through the RISE Program and why?

Two people readily come to mind: Ms. Johnson and Mrs. LaMedica. Mrs. LaMedica has made a significant impact because as a



Freshman you have no idea where to go for items, like who do I talk to about auditing a class, changing my schedule, how many RISE Program elements do I have, etc. She was always there with a smile, answers, and most importantly chocolate. Ms. Johnson was like a mom who always knew how to bring out the best in a child. She was always on hand to encourage and advise me on how to live up to my full potential and how to get the maximum benefit out of my college experience at UD.

Q. Are you involved in any extra-curricular activities on campus?

I am the chapter president of the National Society of Black Engineers which is an organization focusing on academics, professionalism, and community service. It will change your life and is the reason for my job with Merck after graduation. If you are not a member, email ud.pres@gmail.com and join. I am also secretary of the Bioengineering Interest Group, class representative of American Society of Mechanical Engineers, and member of National Society of Collegiate Scholars.

Q. How do you balance that with school?

One of NSBE's goals is to teach you how to balance academics with everything else. I work very well off of deadlines so I just make those as often as possible. Buying a planner and using it was truly beneficial.

Q. Who was your favorite professor and why?

There are actually 3 of them: Profs. Agrawal, Shenton and Santare. Each had a unique and efficient way of transferring knowledge to students.

Q. In your opinion what personal qualities should a student possess to be a successful engineering student?

Time management, dedication, persistence, capacity to handle lack of sleep at times and a student must be outgoing. This is because meeting and working with peers in one's major or year helps in the creation of study groups that come in handy during projects and finals.

Q. What is your fondest memory of the University of Delaware?

I have so many that I can't pick one. They include trips to NSBE conferences, intramural sports, hanging out with friends, roommates, and people in Spencer, Colburn or DuPont Labs at 2:00 in the morning.

Q. What are your plans after graduation?

After school, I will be in a 2 year Rotational Program with the Global Engineering Services Division of Merck and Company.

Q. Do you intend pursuing Mechanical Engineering as a career?

Yes, until it is no longer my passion and then I will do something else.

Q. What advice will you give to students interested in Mechanical Engineering or engineering in general?

Do it!! Be prepared for a lot of work on the front end but large payoffs on the back end. FIND NUMEROUS STUDY GROUPS AND TUTORS and find a mentor both on campus and in your future career.

FROM RISE'S STUDENT ATHLETES

The RISE Newsletter sought to find how our proud student athletes combined competitive sports with engineering majors. Presented here are views from Andrew Harrison, a senior Civil Engineering student and a line backer for the UD football team; and Leah Putman, a senior Mechanical Engineering student and a member of the UD track team.



From left to right, RISE participants: Andrew Harrison and Leah Putman (Credit: www.bluehens.com)

Andrew: "Being an athlete takes up so much time and energy. In season, playing a sport is a full time job. Along with playing, there is a lot of pressure and stress that comes. My sport has taught me many life lessons. I wouldn't trade my experiences as a college football player. As far as my schoolwork goes, I may have been a better student if I did not play, but I'm not so sure.

Over the years I haven't been able to make some of my professors' office hours and had trouble being attentive in classes due to physical and mental exhaustion.

I've had to manage my time well and do work when no one else was doing work. I've had football when everyone else was doing work. I certainly can't blame football for not doing as well in some classes as I

could have. In many instances, the classroom was a way for me to get away from all the pressures of playing football.

So overall, I have loved my experience at UD as an engineering student-athlete."

"I WOULD TELL YOUNG PEOPLE TO START WHERE THEY ARE WITH WHAT THEY HAVE AND THAT THE SECRET OF A BIG SUCCESS IS STARTING WITH A SMALL SUCCESS AND DREAMING BIGGER AND BIGGER DREAMS, I WOULD TELL THEM ALSO THAT A YOUNG WOMAN OR A YOUNG MAN CAN'T DREAM TOO MUCH TODAY OR DARE TOO MUCH IF HE OR SHE WORKS HARD. PERSEVERES AND DEDICATES

Leah: "No matter what thing about me people know first: that I run track or that I'm an engineering major, as soon as they find out about the other I'm going to get asked- "How do you have time?" Honestly, I don't know. I refuse to give up the things I love to do. I make 5 course meals because I'm bored. I've been doing some sport ever since I was five years old. I guess I just don't know what it's like to have free afternoons open to studying, homework, labs and all the fun that being an engineering major brings. Free time is a phrase I hear but haven't learned the full meaning of. I love competing on the track team and in the most hectic times of the semester. I never considered college without it. Even in all the times my roommates and I asked ourselves why we were Mechanical Engineering majors, I never really considered changing my major.

I guess that's why I'm interested in biomechanics; it's where my academic and athletic worlds meet. Dynamics suddenly makes a lot more sense when the rigid bodies are replaced by the thigh and shin of someone running. There's a point to finding all those random variable velocities and accelerations then too. Other than being given what seemed like arduous tasks, being an athlete helped balance college life. As engineers, we easily get caught in hours of homework and don't quit until frustration or success forces it. While all students have to do some work, running a couple of hours each day can actually be helpful. It provides me a large group of people to offer insight on what electives and breadth requirements to take. It gives me a readily available source of people who tell me I'm ambitious for studying engineering and suggest fun that doesn't

involve the design, testing or building of anything. My teammates will never ask me if I found myself summing the forces in the arm of the crane at the construction site on campus. On a professional spin, being both an athlete and an engineer made answering interview questions like "Describe a time when you had to prioritize" extremely easy. I never had to get too far past, "As a captain on a Division I track team..." Like any other student activity, there's a leadership aspect, dealing with people and personalities, persuading, and the need for a really strong work ethic. But no one puts in 2-4 hours a day, 6 days a week for professional skills. Its fun! Who doesn't want a personal trainer, good gym facilities, the occasional free jacket (or sweatsuits, jackets and hats if you're on the football team..), food and never having to think about going to the gym?"

STUDENT OUTREACH

Giving a helping hand to New Orleans

By Lorraine Salamanca
Sophomore, ENEG

Last Spring Break I went to New Orleans, Louisiana with Intervarsity Christian Fellowship. My expectations going into this trip were to have fun with my friends, help people affected by Hurricane Katrina, and experience New Orleans. We left around 8 pm. The drive down was really fun. We made a couple stops to stretch and get snacks and it was awesome driving through states I had never visited before and doing things I'd never dreamt I would do. For example, I ate at Waffle House for the first time in my first visit to Tennessee. We stopped in Birmingham, Alabama at the home of very hospitable relatives of an Intervarsity staff member. The group spent the lovely day resting and visiting a local botanical garden. Not long after, we arrived in New Orleans.



When we arrived we stayed at the NOLA Church Plant. At the time, the two main leaders: Lawrence Sisung, a pastor and Alf Nelson, a staff member were just beginning to launch a program seeking ways to help Katrina victims. Our group of 33 stayed in a recreation building and took turns making dinner. We got in teams and it became very competitive at times. Lawrence and Alf were very happy to have us there. As part of the program, we undertook various activities. There was a church that had flooded and mold was growing on the walls so one of the jobs we did was replace the drywall which turned out to be pretty hard. Alf was in the process of rebuilding his home so some of us went and

painted his garage, power washed things, and insulated the pipes under his house. Lastly, Lawrence volunteered to take a small group out to hand out food to the homeless people in the French Quarter. We had one day to explore Bourbon Street and the French Quarter. We bought souvenirs to bring back to Delaware and even got a chance to eat beignets, which are powdered pastries.

The drive back was long. Very, very long. I slept the whole way back. We did take breaks from the drive to eat but for the most part it was not as much fun because we knew our spring break had ended. This was a great experience and I can't imagine having spent my spring break any other way. I learned that even the smallest acts of help give people hope, and for New Orleans, it meant the revival of their city. A lot of the time, what people in despair need most is a listening ear and a helping hand.

Impacting your world beyond engineering

By Breana Whittaker
Junior, ENEG

As an engineering major, many of us will encounter sleepless nights. We will pull all nighters before an exam and feel like no matter what we do it will never be enough. Our heavy course load makes it extremely hard to find time for other activities. I am an Environmental Engineering major, with minors in Civil Engineering and Black American Studies and I must say it hasn't been easy. I am also involved in RISE as well as many school activities including Women in Engineering, an intramural softball team, and not to mention I am the current president of the Environmental Engineering Student Association. I believe in impacting my world to my fullest potential.



It's all about time management. My belief is to work hard in school and devote much attention to extracurricular activities as well. That is what separates you from other students. I look at my Black American Studies classes not as required electives but interesting and informative breaks from the norm. Community service makes me feel accomplished in such a way that makes me more confident during any school week. As president of a club I have gained vital knowledge about working with

others which I am sure will be beneficial in the future. Intramural softball is an hour time commitment once a week that allows me to fully unwind and enjoy the company of my good friends. Last week I received confirmation I had successfully landed my first ever internship and nothing makes me feel better than the sacrifice involved. Believe me it is worth adding an extra feature to your degree be it community service, a religious activity or an intramural sport. Explore all that UD has to offer, integrate it into your college career and I am sure you will be pleasantly surprised at what you gain!

MAY 2011

RISE Newsletter

RISE STUDENT ACTIVITIES (2010-2011)

MONTHLY WORKSHOPS, SYMPOSIA, STUDY BREAKS



MAY 2011

RISE Newsletter

STUDENT INVOLVEMENT IN SOCIETIES: SHPE AND NSBE



RISE Newsletter

STUDENT ORGANIZATIONS

NSBE

Do you find yourself looking for academic support from your peers or have the need to be affiliated with a professional body? The answer to your search is the National Society of Black Engineers (NSBE). NSBE strives to help all individuals excel academically and succeed professionally. As a member or guest of NSBE you are never alone, because everyone is like family.

The National Society of Black Engineers (NSBE) is a student-run organization that seeks to improve the quantity and quality of black engineers across the nation. It was founded in 1975 at Purdue University and its mission is to increase the number of culturally responsible black engineers who excel academically, succeed professionally and positively impact the community. One does not need to be black or an engineer to join NSBE but needs to support the mission and stand for excellence.

As a member of NSBE, one can engage in many exciting activities. Just this year NSBE hosted various professional, academic and community service events which included: study nights, resume

building, Blood Drive (members volunteered and donated blood), Adopt-a-Highway (cleaned up Wyoming Road) and "Teach Me to Build" (a construction contest). Other events held were a presentation on graduate school preparation and undergraduate research, Community Service Week and a "Show-and-Tell Fashion Show" with Phi Beta Sigma.



NSBE also embarked on outreach programs such as a networking event with alumni themed "A day in the life of an engineer" and undertook a tour of W.L. Gore and Associates where students had a chance to familiarize themselves with electronics, biomedical hardware, alternative energy solutions and much more.

Aside from professional affiliation and academics, NSBE keeps students entertained with our award winning step-team, intramural football team, RSO field day, game nights, bowling nights, and chances to win money in our 50/50 raffles.

The best thing about NSBE is you are destined to find a job and meet people from all over the country. Every year there are conferences such as the Fall Regional Conference and National Convention that offer entertainment beyond expectation at new destinations. NSBE holds some of the largest job fairs where companies interview and hire NSBE members on the spot. Networking is a key skill and NSBE offers that with Zone Summits where you are able to meet with NSBE members and Alumni in the tri-state. By joining NSBE you will thrive to exceed your academic and professional goals while simultaneously impacting the world. **Lastly, you will also be 2-HYPE!**

SHPE

The Society of Hispanic Professional Engineers (SHPE), University of Delaware chapter, is an organization based on networking and promoting professional and personal growth. SHPE can provide you with a multitude of opportunities for the development of a very strong, and very complete professional profile. Being located near Philadelphia and surrounded by engineering companies offers the chapter at the University of Delaware with unmatched resources. SHPE has served as the connection between the student body and surrounding companies. Networking events, on-site visits, guest speakers, student-driven project development, hosting company officials and aiding in their recruitment, as well as many other



activities have helped the student body merge smoothly into the workforce. Other events include national and regional conferences, workshops, competitions, and community service projects. Each event is geared toward supplying members with useful career building information and opportunities.

Benefits of a SHPE membership are scholarships, fellowships and co-op opportunities, access to the SHPE Career Center, professional, career, & leadership training, guides for graduate school application process, and more.

Being Hispanic or an engineer are not requirements for becoming a member of SHPE. Any student can join SHPE.

So come join us in Fall 2011! For additional information please email us anytime at jrafaels@udel.edu.

RISE Newsletter

FEATURED ARTICLES

Is this the age of megaquakes?

Credit: <http://cosmiclog.msnbc.msn.com>

First there was the earthquake and tsunami in Sumatra in 2004. Chile was shaken and lashed violently a year ago. Japan is still reeling from the twin disasters on March 11. It seems as if the Earth has woken from a long slumber and is violently re-jiggering its plates. Is there any truth to the notion? The question of megaquake clustering, which I explored in the days following the 9.0 earthquake and tsunami in Japan, was a hot topic of conversation at the Seismological Society of America's annual meeting in Memphis, Tenn., according to various media reports. There, Charles Bufe, a seismologist retired from the U.S. Geological Survey in Denver, said the spate of recent megaquakes is very similar to a string of seven magnitude 8.5 or greater quakes that struck between 1950 and 1965.



The intervening decades, he noted, were quiet. Bufe and USGS colleague David Perkins analyzed the clustering and concluded that it's unlikely just random. "It's very statistically significant," Bufe said, according to the Seattle Times. "We think we're in an increased hazard situation for these very large earthquakes." According to their calculation, there's a 63% chance that another magnitude 9 or greater quake will strike somewhere in the world within the next six years. If these megaquakes are random, the chance is about 24%.

Other experts at the meeting, however, supported the notion that what seems like a clustering of megaquakes is really just random, except for clusters of aftershocks in the vicinity of the major rupture, such as those continuing in Japan. For example, seismologist Andrew Michael, who's with the USGS in Menlo Park, Calif., announced at the meeting that he's examined databases for evidence of clustering and, as he told me in an email in March, found "there is no evidence of global large-earthquake clustering." That said, scientists are far from being able to predict earthquakes and acknowledge there is much to learn about them. It's possible that entrenched ideas will be proven wrong, said Rick Aster (outgoing president of the seismological society), encouraging scientists to keep asking questions.

One year after spill, where's the oil?

By Alan Boyle

Credit: <http://cosmiclog.msnbc.msn.com>

One year ago, an oil-rig explosion in the Gulf of Mexico touched off a deep-sea leak amounting to 2.5 million gallons of Louisiana light crude every day for months. In all, nearly 207 million gallons (4.9 million barrels) of oil are thought to have gushed from the leak, along with huge volumes of methane. So what's happened to all those petrochemicals over the past year? The answer is surprisingly complex and contentious. Or maybe it shouldn't be so surprising. After all, the task requires figuring out what effect Mother Nature and millions of gallons of dispersants had on the plumes of oil and gas, as much as a mile beneath the sea's surface. What's more, the question carries policy implications: BP and the other companies that operated the well would have an interest in downplaying the spill's long-term legacy, while that's exactly the issue that BP's critics want to highlight. The legal implications could also be huge. Scientists already are finding that their studies are being impeded by civil and



criminal investigations into the spill.

Consensus: All stakeholders describe the spill as catastrophic. They believe some of the oil evaporated, some was gobbled up by microbes, some was burned, some washed up onto shore, some is still washing up as tar balls, some was dispersed in the sea, and some settled to the bottom of the ocean.

One science perspective: A study led by Terry Hazen, a microbiologist at the Lawrence Berkeley National Lab reported a newly identified bacterial strain was digesting the oil at a faster-than-expected rate. "We took 170 samples from where the plume was and couldn't detect any oil in the water column," Hazen said. His team also saw no sign of oxygen depletion, which often

arises as a result of microbial blooms. Only 6% of the team's deep sea samples contained oil associated with the spill. As an example of natural cleansing, he cited how the Gulf's ecosystem handles 400,000 barrels worth of oil that seep naturally every year. This cleansing by bacteria according to Hazen, has literally been going on for millions of years.

Another perspective: Studies conducted by the University of Georgia's Samantha Joye and her colleagues tell a different tale: During diving expeditions on the Alvin submersible vessel, they found that areas of the seafloor around the spill site were covered with an oily muck and littered with dead organisms. Joye said her findings don't really contradict Hazen's. She stressed that the results from his team on microbial digestion were based on the degradation of a particular component of the oil known as alkane, in a particular zone of the Gulf waters. "His results were based on the deep-water plume, and some people have extrapolated that to the entire oil spill," she said. "And I think that's inappropriate." She said the Deepwater Horizon blowout of 60,000 barrels a day dwarfed the natural seepage of 500 to 1,000 barrels a day, and doubted that "magic microbes" could have made much of a dent in last year's spill. Hazen acknowledged that the area around the spill site is all mucked up but says his analysis of core samples led him to a different conclusion.

AN INTERNSHIP EXPERIENCE AT THE WORLD TRADE CENTER

**By Alex Arguello
Senior, CE**



Over last summer and winter I had an opportunity to work at the construction site of the World Trade Center (WTC), one of the largest projects in New York City. I worked as an intern for a company that specializes in foundations called Urban Foundation Engineering. Urban Foundation Engineering is a unique niche company that builds foundations for skyscrapers in very small urban environments. My specific project at the World Trade Center consisted of building a pedestrian tunnel underneath the West Side Highway connecting the American Express Building to One World Trade Center. My role as an intern on this project was to primarily test the concrete that was being poured on site. I did this by using Intellirock II electronic sensors. These were sensors that were embedded in the concrete at specified locations that could at any time download temperature, moisture and

maturity. These are all very important factors for massive concrete pours such as those that were occurring at my jobsite. To put this into perspective a massive concrete pour consists of 1000+ Cubic Yards (CY) of concrete. Each concrete truck has 10-12 CY of concrete. This means hundreds of trucks carrying concrete were coming to the site over the course of a day. My job was vital to this project because I had to monitor and locate if any concrete temperatures were off recommended limits. Problems with concrete temperatures can lead to cracking which can lead to possible failure.

My involvement in the project was very exciting and allowed me to learn a lot about urban city construction. I did a vast array of tasks that allowed me to see the whole picture of construction all the way from design to execution. I believe that due to my internship I was able to better understand what I learned in the classroom and had the chance to actually see what is logical and feasible out in the field.



Excavation and foundations for tunnel

A TRIP TO AUSTRALIA, MY PERSPECTIVE

**By Myles Powell
Junior, CE**



Last winter I traveled abroad to Melbourne, Australia, where I studied fluid mechanics and transportation engineering. The degree of difficulty pertaining to these courses was challenging as expected for a regular semester; however, it was a great experience and one that I will remember for the rest of my life. Taking classes in a foreign country was truly amazing as it had the added benefits of exploring the subtleties of another country. From lounging in the park with kangaroos, to taking a tour of the Opera House, I was almost overwhelmed with the beauty and elegance of Australia. In essence, I felt as though the general quality of life in Australia is higher than what we are accustomed to in the U.S.

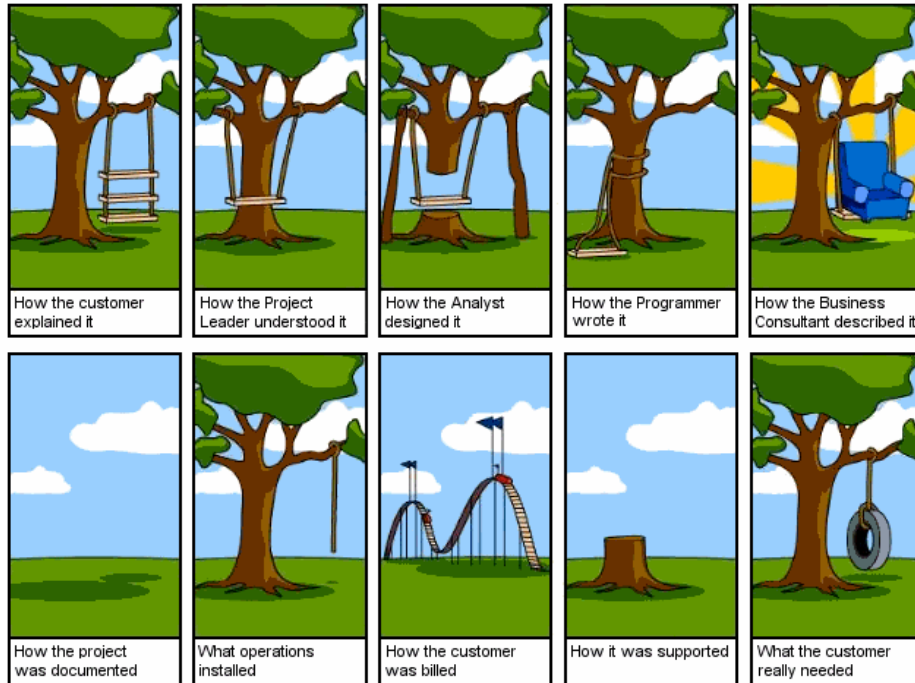
Surprisingly enough, I am almost positive that one of the most memorable experiences for me was my encounter with Australia's version of fast food. The dorm where we were housed was located practically across the street from a McDonalds. This is where I experienced "the commercial fast food experience". The quality of product was exceptional and the service was impeccable. This was not a one-time occurrence either. On the number of times I occasioned to be there, the quality of service was always one to reckon with.

My experience with Australian food can typify my general impression about Australia. It was terrific savoring the delights of another country: great sights, rich culture, friendly people and a truly amazing atmosphere. It was certainly one that went beyond imagination; one which an individual can best describe by experiencing for him or herself.



Sydney Opera House

FUN PAGE



THE AIRPLANE

A programmer and an engineer were sitting next to each other on an airplane. The programmer leans over to the engineer and asks if he wants to play a fun game. The engineer just wants to sleep so he politely declines, turns away, and tries to sleep. The programmer persists and explains that it's a real easy game. He explains, "I'll ask a question and if you don't know the answer you pay me \$5. Then you ask me a question and if I don't know the answer I'll pay you \$5." Again, the engineer politely declines and tries to sleep. The programmer, now somewhat agitated, says, "OK, if you don't know the answer, you pay me \$5, and if I don't know the answer, I'll pay you \$50!" Now, that got the engineer's attention, so he agrees to the game. The programmer asks the first question, "what is the distance from the earth to the moon?" The engineer doesn't say a word and just hands the programmer \$5. Now, it's the engineer's turn. He asks the programmer, "what goes up a hill with three legs and comes down on four?" The programmer looks at him with a puzzled look, takes out his laptop computer, looks through all his references and after about an hour wakes the engineer and hands him \$50. The engineer politely takes the \$50, turns away, and tries to return to sleep. The programmer, a little miffed, asks, "Well? What's the answer to the question?" Without a word, the engineer reaches into his wallet, hands \$5 to the programmer and returns to sleep.

THE TRUE MEANING

What is said

- A number of different approaches are being tried.
- An extensive report is being prepared on a fresh approach to the problem.
- Developed after years of intensive research.
- Modifications are underway to correct certain minor difficulties.
- Preliminary operational tests were inconclusive.
- Test results were extremely gratifying.
- The design will be finalized in the next reporting period.
- The entire concept is unworkable.
- We need close project coordination.

What it means

- We don't know where we're going, but we're moving.
- We just hired three guys... We'll let them kick it around for a while.
- It was discovered by accident.
- We threw the whole thing out and are starting from scratch.
- The darn thing blew up when we threw the switch.
- It works, and boy are we surprised !
- We haven't started this job yet, but we've got to say something.
- The only guy who understood the thing just quit.
- We should have asked someone else.
- Alternate: Let's spread the responsibility for this.

An OPEN LETTER TO ALL STUDENTS

Dear Editor, I am Touseef Habib, a junior in Chemical Engineering. I would wish to use this medium to encourage freshmen by recounting my freshman experience with them so they can avoid potential pitfalls that may crop up at the beginning of their academic pursuit.

When I was a freshman and told people my major, the immediate reaction was respectable admiration. This is due to the belief that Chemical Engineering is one of the most challenging majors nationwide. Still freshman year was supposed to be the easiest year irrespective of major. However, things were a bit different for me. Coming into college my confidence was at an all time high because I had cruised my way through the International Baccalaureate Program in high school, and this, combined with a coursework of basic introductory classes that I had already seen in high school led me to develop bad habits and a poor work ethic. I stayed up late, did not finish homework, missed classes, and when I did show up to class, I tended to sleep through them. The first few weeks went smoothly, but as the semester progressed my bad habits started to take its toll. I started to perform badly on quizzes/exams, and turned in assignments that did not meet expectations. I eventually realized my mistakes, but always felt I could recover.

Truth was I could not; I had to talk to the Assistant Dean and drop two classes to save my fledgling GPA, two classes in freshman fall without even taking an engineering class yet. The reason I could afford to drop classes was because of numerous credits from high school. After freshman fall ended, I had to evaluate myself and I vowed to work harder. I enrolled in winter session to make up for dropped classes. Winter session was a breeze and I felt I was prepared for freshman spring. I still was not sure if I wanted to stay in Chemical Engineering or not, especially the way I performed in fall but I figured I could only find out by taking the introductory CHEG 112 class. Spring semester started out like fall. The first few weeks were simple and I found myself repeating the same mistakes from fall semester. When the first exam came for CHEG 112, I thought I was prepared for it, but I was in for a rude shock. During the exam, I felt so helpless that I started contemplating switching majors. After the exam ended, I was somehow relieved to learn others shared my sentiments. I ended up with a poor grade, and after some reprimanding from the lecturer, I knew it was time to get my act together, ever more so as I was informed that the level of difficulty for each exam increased as the semester progressed. I devoted most of my time to this particular subject and I made changes to time spent on homework, reading text books

more in depth and attending to office hours with my instructor. It paid off in the end as I scored higher than the class average on my second exam and went on to pass CHEG 112. The instructor was impressed by my performance overtime and I knew I could only do better for the remainder of my college years. In truth CHEG 112 served as a reality check and a stepping stone for high academic expectations in my engineering classes.

The biggest lesson I learned from my torrid freshman year was the importance of time management. In as much as Chemical Engineering, like all other majors is challenging, it requires focus. Anybody can do it. The secret to time management is to end procrastination and get things done as soon as possible. For the current and future freshmen, CHEG 112 (like any other class) is a test of character and students who make it are those with a will to do so. It takes commitment and a true sense of purpose to succeed. Don't give up!

ACADEMIC SURVIVAL KIT FOR ENGINEERS

By Kelvin Pittman, Senior, ENEG
and Leslie Mills

Source: <http://www.udel.edu/AEC>

• **Set Goals:** Set SMART short-term and long-term academic goals. Goals should be **Specific, Measurable, Attainable, Realistic** and **Time-bound**. Goals must then be evaluated periodically to assess whether you are on track to achieve them or not. If you are not on track, restructure your goals or get assistance where needed.

• **Manage Time Effectively:** Organize academic tasks and attach a priority level to each task. Schedule an ample amount of time for each task and work on it till it is completed. Where necessary divide complex tasks into manageable sub-groups.

• **Studying Strategies:** Review notes from class while they are still fresh and endeavor to work on course material regularly. Work hardest when you are at your best and avoid distractions as much as possible. Take control of the material you are studying and test your understanding of it. Evaluate your progress each step of the way.

• **Test-Taking:** Lay out a strategy prior to the exam. Plan in advance: during the semester, a week prior to the exam and hours before the exam. Make some effort during the course of the semester to know the material at first hand. Make use of tutors, TA's and professors where need may be prior to the exam. Do well to manage stress before and during the exam.

