

Sid Martin, '81, '82 (Engineering)
Remarks to Graduate Commencement
UMass Dartmouth
May 23, 2009

Graduates, parents, families, faculty and staff, alumni, and friends, thank you for inviting me here today. It is a great privilege to speak on behalf of all UMass Dartmouth alumni who have received their graduate degrees over the years. I truly appreciate the opportunity to speak and hope you understand that some of your best years lie ahead of you.

I also wish to take a brief moment to thank my employer, Northeast Maritime Institute, for their belief in my research and the development of splash proof coatings. The Institute supported my opinion that mariners and consumers didn't need to suffer if their electronics were casually exposed to water. Through this research, we have developed various methods to keep radios, cell phones and other electronic items from being affected by exposure to water. This will likely save the lives of people in distress in the very near future.

Graduates, it is a wonderful honor to reflect on my relationship with UMass Dartmouth on the same day that you begin your relationship as alumni of the university. Simply, I love this campus and enjoy every visit I've made back here. I remember being entranced by the architecture of this school the first time I came to visit and was drawn to the modern style. I knew then that the contemporary architecture reflected the education I would be using into the 21st century.

Today, the architect of this campus, Grattan Gill, is receiving an honorary doctorate. I want to thank him for the wonderful job he did in designing these buildings, and let him know that I've spent a considerable amount of time admiring the architecture of this campus. In fact, I imagine that there are a few parents admiring the architecture as we speak...some here in this beautiful amphitheater and some who may be lost in Building 2 trying to find this ceremony.

Being here today reminds me of my time here 27 years ago. We had state of the art computer equipment, including a PDP 11 with a fan that was always blowing. Otherwise, it would crash from excessive heating. Computer graphics didn't really exist at the time and what was available was written by a couple of students. In truth, we were being asked to create text books on the subject. We did have a VAX 11 780 which eliminated the need for punch cards in programming. Instead, we used terminals that had "bells". They would ding (because it took so long to compile) or buzz when the program completed. Also, the emphasis was on conserving memory as no one would ever need more than 64Kbytes of storage for both their program and their data.

We didn't have any method to display moving graphics back then so I wrote algorithms to rotate objects in space; make graphics move; and show them in motion. Star Wars was the most popular movie of the time and I was able to generate a short film that mimicked the scene where a starfighter flew into the death star. This was done by working alone on the VAX 11 780 for many nights. I would turn out the lights, draw a picture on the screen and then take 3-4 frames of 8 mm film each time the screen was filled. The glowing green screen would be recorded on camera. For its days, it was extremely impressive and I was asked to attend the Board of Trustees meeting to show the film. Everyone was amazed. With today's technology, an experienced computer graphic artist could create something far more impressive in less than a day. Humbling indeed.

When I told my father I was working on computer graphics, he was confused. He had no idea why you would need computer graphics when a pencil and graph paper worked so well. Now, this bit of nostalgia may seem strange to you, but ask yourself "what will I think of my current research 30 years from now in 2039?"

After graduating, I went to work with my father as a consultant. He asked me, "What are you going to do with that computer graphics programming ability?" I said I thought I might be able to sell the idea to the Pro Football league as they might like it. He laughed at that idea. So, we focused on computer graphic training programs for nuclear power plant operators. Today, football games have yellow first down lines that appear magically on your television while no new nuclear plants have been built in 30 years. I guess I missed the mark on that one!

Since graduating from UMass Dartmouth, I have visited 27 countries including China more than 20 times. In total, I have spent nearly a year living and working in China (2, 3 or 4 weeks at a time). I have traveled extensively through North America, Asia, Europe and Africa and discovered the importance of learning the local language. I might suggest that you learn to say hello, please and thank you in the language of the countries you visit and make an attempt to learn local customs because you'll be better received.

My education has allowed me to participate on teams that have placed systems on the top and bottom of the ocean, in aerospace, in near space and on the Mars Lander. I've had a lot of fun on challenging projects.

Many months ago I visited the Today Show on NBC where I demonstrated to Matt Lauer how a cell phone could be immersed in water and continue to work. This was my first exposure to makeup and hair artists. They were happy to apply my makeup, however they refused to work on my hair. They said scientists were supposed to have messy hair.

With all of these experiences, someone thought it might be helpful if I could provide some inspiration to you on behalf of all UMass Dartmouth alumni. To help me accomplish this, I chose examples of how others have inspired me both here as a student and later in my life. One of the most important lessons I learned at UMass Dartmouth was to break my standard thought patterns. I can remember encountering a very young Dr. Alan Hirshfeld who convinced me to take a half credit course he was offering. He said we were going to measure the speed of light. It sounded cool but I was skeptical. How could you measure the speed of light when it travels so fast...even a short burst of light would instantly travel miles. He smiled and stated the answer was in the basement. He told me we'd reflect the light with mirrors in the tunnels under the University.

We ran around like tunnel rats adjusting these tiny little mirrors that would reflect light but if the laser beam didn't get to a receiver, it was because a single mirror was out of adjustment by a degree. If someone sneezed, many hours of work would be blown away. Literally!

Then there's Professor Phillip Viall with whom I graduated. We'd send computer messages back and forth when he was studying at WPI. He'd send "H", "I", "S", "T", "D" (Hi Sid). Phil invented the first text messaging in my opinion; but back then it took about 15 minutes to send five letters. He inspired me to think about what we could do with new technology even though it wasn't perfected.

Then there's Dr. Lester Cory, along with Professors Phillip Viall and Richard Walder who inspired me to give to others. I've enjoyed 27 years of association with the SHARE Foundation. The education that I received at this University has enabled me to be part of aiding others to speak even when no one may have believed they could.

I believe that the entire faculty at UMass Dartmouth strives to inspire us to be the best people we can be. Be sure to appreciate their efforts by being the best at whatever you do!

At Northeast Maritime Institute the CEO, Eric Dawicki, has inspired me to seek peace in the world. We each have the ability to improve the status of peace in the world by opening our homes to others and sharing experiences. Above all, we should always strive to create employment opportunities in poor countries as it is the idle hands that seek destructive methods to solve problems.

My parents have always been inspirations for me. My mother continues to tell me that I can do anything I set my mind to. My father has never stopped his effort to make me realize that family is the most important thing in life and that I should cherish the time spent with my wife and children.

My wife, Stacy, has inspired me to look at music and art and realize that our creativity comes from the artistic qualities that we each have. I avoided the art building during my time here and I have learned that was a mistake. Speaking of mistakes, Stacy always helps to remind me of my humanity by pointing out my mistakes. Apparently, I'm far more human than I first imagined.

There have been many people who have inspired me. But here's what I want to pass on to you:

1. Study how you and others think. I've had people tell me that they don't understand how I think. That's not necessarily a bad thing. Don't just think "outside of the box"; look at your problems sideways, from the bottom, and any other angle to find the solution to a problem. And always "check the basement" by seeking answers in places that may be new to you.
2. There are things that you know now, but you'll understand later. When I was 28, I woke up one day and could visualize the integrations of the various functions that I had previously done through memorization. I literally saw the plots and solutions in my mind. I hope you have similar experiences.
3. Share development credit whenever possible. People will feel good working with you on new projects knowing you'll share the credit of discovery.
4. Media – Media attention is wonderful when you are ready for it, enjoy it when it happens, but please don't let it change who you are.

Finally, as graduates of this university you now have responsibilities. You'll have responsibilities that are readily understood and expected. However, you have a responsibility to yourself. That responsibility is to be honest, have integrity and to embrace hard work. This will help to ensure your success.

Graduates, thank you for inviting me to speak to you today. Remember that when you seek answers, look for the sideways solution and make sure to check the most unlikely place, for me it was a basement!