

**Remarks for John Glenn High School Graduation  
Westland, Michigan, June 1, 2013**

**By William P. Blair (JGHS 1971)**

Good morning, and thank you very much for this honor and this recognition. Suffice it to say that when I was sitting where you are, I had no idea that I would be standing where I am today! I have many people to thank for the love and the support that have been part of my journey, starting of course with my parents who provided the grounding, the resources, and the freedom for me to pursue lofty and at times impractical goals and to follow my dreams. I have been inspired and challenged by mentors and teachers, by interactions with collaborators, post docs and graduate students. But mostly I want to thank my family, and in particular my wife, Jean Shaffer Blair, who has enabled me to do what I do and been my rock throughout the years. It has been a real team effort every step along the way.

When I was first told that I would have a few minutes to talk to the graduating class, I started to fret about what I would say, what I *could* say, that might not only be appropriate but possibly even inspirational to you. I took some solace in the fact that I don't remember who talked at my graduation and I certainly don't remember anything that was said, so perhaps I shouldn't overthink this problem! But when I mentioned this to my wife, Jean, she said, "You're an astronomer—just tell them to reach for the stars!" I guess it would be an obvious theme for today.

You know, it is so different looking forward and looking back. I think the reason they have people like me come back and talk at graduation is to provide that other perspective. In any event, I want to share a little bit of my journey with you, in hopes of providing some insight that you might find useful on your own journeys, which have already begun, but which take a big step forward today.

**First, find something you like to do, and do it.** I'm sure many of you are already getting the questions about "What are you going to DO?" If you know, more power to you, but I certainly didn't know when I was graduating. I knew I liked science and math, not because they were easy, but because they were a challenge, and I enjoyed the challenge. But I didn't think in terms of a career until much later, and even then I didn't know exactly what I was getting into. I mean, what does an astronomer DO? Even if I thought I knew, I could have never imagined the things I've actually done: running a NASA satellite project? Using the Hubble Space Telescope and large ground-based telescopes? And now working on preparations for NASA's next flagship mission, the James Webb Space Telescope? I couldn't have dreamt that I would do these things ahead of time. But if you do something you love, the rest of the pieces tend to fall into place and good things happen.

**Second, be a lifelong learner.** School is great. You should take every opportunity you can to learn new things and expand your horizons. But the pace of change is so great, you will never keep up unless you learn how to learn, and keep doing it. This is probably more important today than it ever has been, especially in the area of technology. It is amazing to me that my Ph.D. thesis was typed on an IBM Selectric typewriter! My research was done in the Library. No computers, no internet, no Google, no Wikipedia. I couldn't possibly do

what I do today without a lifelong striving to learn new stuff. And the pace of change is only accelerating.

Also, most of you will not follow the old model of getting a job in one field and staying with it for your whole working career. Research shows that people entering the workforce today may not only change jobs multiple times, but will change career tracks multiple times during their working lives. Becoming a lifelong learner will be crucial to your future endeavors and your future success.

**Thirdly, foster your powers of discernment.** We live in the Information age. Technology makes so much information available, it can easily make your head spin. But not all information carries the same weight. The ease of making information available also means that much of that information is garbage. In the early days of computing, there was an acronym: GIGO—garbage in, garbage out. Computers could calculate quickly, but if the programming or data entry was wrong, you just get the wrong answer more quickly. Your brain is a computer. If you put garbage in, well, let's just say you can confuse your computer. *Discernment* means applying good judgment to the information you receive, not believing everything you hear or read at face value. Apply a good dose of common sense.

If you don't learn to apply discernment to the information you receive, one of two things will happen: either you will simply reinforce your preconceived notions and you will never grow in your thinking, or you will be taken advantage of by the "spin masters" out there who are providing the garbage information to begin with.

As a case in point, I give you the so-called climate change debate. As an astronomer, I spend most of my time looking outward into the universe, but more recently I've turned my gaze back toward our home planet, and I don't like what I see. Over 95% of earth scientists tell us that not only is global warming real, but that the primary cause is human use of fossil carbon. There really is no debate. And yet, somehow, fully half of the adult population in the US (including many in congress) allow themselves to be duped into thinking that it is not real. If you were sick and went to 10 doctors, and 9 of them told you that you had cancer and should get treatment while the other said, "I'm not sure. Let's wait and see what develops...", who would you pay attention to? Discernment is important in all matters, big and small. Train your computer, folks. *Learn to discern.*

**Finally, I urge you to maintain broad perspectives.** I grew up during the dawn of the space age, and was inspired not only by the heroics of our high school's namesake, but by the Apollo flights to the moon. One of the most enduring memories that arose from that time was that iconic image of the earth hanging above the lunar horizon, suspended against the blackness of space. No country borders like in the maps we studied in social studies and geography class. No communist countries and democracies, no eastern and western hemispheres, no Judeo-Christian or Muslim or Hindu countries. *Just one earth.* Everything that we know of that was and is alive in the universe resides beneath a tenuous blanket of atmosphere on the surface of that blue marble. It changed our perspective of ourselves forever.

Perspective, or looking at things in different ways, can be an important way to maintain balance in your life. If you live in the city, get out and experience nature. Travel to

developing countries and it will definitely give you a new appreciation for what we have in our country. Listen to different kinds of music. Learn about different religions and maybe you will better understand world issues. As a scientist, I have found it beneficial to also consider spiritual and religious perspectives—combining two different world views that, taken together, provide a clearer understanding of our existence in this universe than either of them alone. For you, maybe keeping a broad perspective will mean something different. But to paraphrase the old Native American saying, if you walk a mile in another person's moccasins, you are bound to learn something not only about them, but about yourself.

So as you take the next steps along your journey, I congratulate you, I wish you the best of luck, and I hope you will keep these thoughts in mind. Find something you like to do and do it. Be a lifelong learner. Foster your powers of discernment. And maintain broad perspectives. Oh, and while you're at it, *REACH FOR THE STARS!*