



## Personal Reflections

12/20/2016

Dear IMSA Community,

It's been an eventful time since the Cubs won the World Series! It was amazing to see 5 million people celebrate the Cub's victory. Hopefully we won't have to wait another 108 years to relive the experience. Last week we had a historic election and now, our country will transition power from President Obama to President-elect Trump.

Heightened discourse followed this historic election and rising tensions and fears are being experienced, especially by minorities, immigrants, refugees and others groups. IMSA will remain the safe and welcoming place that it's always been for 30 years. Our counselors are available for our students, and our faculty and staff are alerted that students might want to talk about the election results. We've seen national election results give rise to heightened concerns about America's future. I'd like to share some reassuring thoughts about this:

**For all of us who are concerned**, let me suggest that we must not panic. We don't yet know what changes in policies will occur.

**For all of us who are concerned**, let me suggest that we must not give up. We live in a democracy and we must continue to exercise our duties as citizens.

**For all of us who are concerned**, let me suggest that here at IMSA, we will continue to be an open, welcoming family and our environment is safe and inclusive for everyone! For each and every one of us! We will uphold our values and beliefs, which include:

***We believe that...***

All people have equal intrinsic worth.

Belonging to a community requires commitment to the common good.

Diverse perspectives enrich understanding and inspire discovery and creativity.

As we celebrated Veteran's Day last Friday, we remembered the service of fellow citizens that fought and even made the ultimate sacrifice for our freedoms and our rights. Thank you to IMSA's military community for making a sacrifice for something larger than yourselves. We were honored to recognize Captain Jeff Truitt, U.S. Navy and IMSA Class of 1989 – Naval officer, lawyer and non-for-profit leader – as our guest speaker. Captain Truitt is the immediate past-Chairman of the Board of Directors of Stop Hunger Now, Inc., an international relief and development assistance agency that in 2015 packaged approximately 60 million meals through their U.S. and affiliate operations. In his remarks, Captain Truitt reminded us, “there are many ways to serve.”

Jeff Truitt embodies IMSA's 30th anniversary theme of “Think.Different. Act.Bold” by applying IMSA's education and leadership opportunities to global security, prosperity and social



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justice. My last Personal Reflection considered "Act.Bold." Today, I'll share how IMSA has thought differently over the years.

From its inception, IMSA sought to push the boundaries of teaching and learning. In 1986 founding staff and faculty members created a learning laboratory environment where faculty and staff could innovate, research, write and publish as a community of scholars. In 1992, IMSA established the Center for Problem-Based Learning (CPBL). "The Center" served as a leader for research, teacher training, curriculum development, evaluation and information exchange in the emerging field of educational innovation for K-12 classrooms. PBL is a system that organizes curriculum around "ill structured" problems requiring students to apply skills and knowledge from multiple disciplines in their quest for solutions. CPBL would eventually inform pedagogical and instructional innovations in schools from Chicago to Thailand, South Korea and throughout the world. Last year, IMSA provided PBL training to teachers at all 17 newly designated Chicago neighborhood STEM high schools through our Professional Field Services department.

As a learning laboratory for imagination and inquiry, IMSA experimented with pedagogical approaches at once piloting some, discarding others, and exporting some to institutions both here and abroad. In 1993-94 IMSA Emeritus Dr. David Workman piloted "The Calculus-Based Physics Exploratory Study" that involved three coed sections and one all-female section for 1st semester, then all co-ed sections for 2nd semester. It was featured on NBC's *Dateline*. The Study showed that female participants had greater self-confidence with greater enrollment and course completion resulting from the experiences of the all-female section. For more information on this groundbreaking work visit IMSA Digital Commons. (Illinois Mathematics and Science Academy, "1994-95 Annual Report, RESEARCH innovative TEACHING and SERVICE" (1995). Annual Reports. Paper 7.

Incidentally, if you haven't discovered our Digital Commons, you're missing out! When IMSA launched 30 years ago, one way we thought differently was through an emphasis on not only on providing a uniquely challenging education to our residential students, but also improving math and science excellence around Illinois and beyond. In addition to the thousands of teachers and students that benefit annually from our outreach programs, *DigitalCommons@IMSA* provides worldwide access to IMSA's scholarly, innovative and pedagogical activities. In FY16, there were 804 new works posted, 64,693 full-text downloads from 4,112 institutions (education, library, government, organization, commercial, military) in 166 countries. Of the 64,693 full-text downloads 43,790 were from the US, and 5,085 of those were from Illinois. One of the newest and growing additions is a collection of alumni dissertations, everything from bioterrorist agents to swarm computing.

As IMSA continues to "Think.Different.," we're exploring how we can contribute to solving the grand challenges and most vexing problems of our world. This new effort will require concerted



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energy and a laser like focus toward adding value worldwide. There are challenges ahead, but I have set a moonshot goal of affecting the lives of a billion people through the efforts of our current students, faculty and staff. Thirty years of thinking different have positioned us well for the future, a future in which we must act bold!

Respectfully,

José M. Torres, Ph.D.