



Personal Reflections

6/8/2017

Dear IMSA Family,

Congratulations on a successful completion of the 2016-2017 academic year! For this final reflection of the year, I wanted to share with you my commencement speech to the Class of 2017.

We have been celebrating our 30th anniversary this past year. Therefore, I want to reflect back on our first graduating class, the Class of 1989. The Commencement program included the following quote from Dr. Carl Sagan.

"The need to understand how the universe works is fundamental to human nature. It is also essential for safely managing the human future; but foolishly we have designed a society based on science and technology in which hardly anyone understands science and technology. This is a clear prescription for disaster.

Our future depends on producing and encouraging highly competent, ethically responsible young scientists, as well as a much greater scientific literacy in the general public.

The Illinois Mathematics and Science Academy in Aurora, Illinois, is dedicated to meeting this challenge...

It is a gift from the people of Illinois to the human future."

Dr. Sagan's words are as true today as they were when he first uttered them back in 1989.

It is the **cost** of this "gift" from the people of Illinois that I would like us to consider this morning. How much does it **cost** the people of Illinois to **give** the gift of IMSA to the human future?

Several months ago, while I was testifying in Springfield before the Senate Higher Education Appropriations Committee Hearing, one of the legislators divided our total budget of over \$18M by the number of students attending IMSA, 650, and declared, "It costs you approximately \$30,000 per student per year to educate students at IMSA!" The legislator said, "This is far more than the average support provided to students in schools in Illinois."

On another occasion last month, I was at an Executive Club Luncheon and a gentleman there found out that I was the President of the Illinois Mathematics and Science Academy. He asked me, "Honestly, what does it cost to go to IMSA?"

Well, fresh off the hearings in Springfield, I didn't want to hold my tongue in response to the question about how much it costs to go to IMSA, so I said, "**Honestly**, it **costs** our students their ego and pride."



Personal Reflections

6/8/2017

Before they come to IMSA, their academic self-concept is defined by what researchers call the "big-fish-little-pond effect." The hypothesis is that it is better to be a big fish in a little pond (i.e. gifted or an advanced student in a regular school) than to be a small fish in a big pond (i.e., gifted or advanced student in a gifted school).

Our students are the smartest, fastest, geekiest kids in the school prior to coming to IMSA. They get A's without working hard; they often don't have to do homework; they're often unchallenged; they're often bored to pieces; and, frankly, these students learn to hide their smartness prior to coming to IMSA.

When they do come to IMSA, it can cost them their pride and their ego. They're now not the biggest fish-the most advanced or gifted. And, they're in a small pond-i.e., they're among others who are also gifted / advanced.

When you are one of 650 students, many who were ranked in the top decile-even ranked number one in their class, you quickly find out that there are other classmates who may be smarter than you, work harder than you-and may be more competitive than you. They may have been exposed to more academic tools, or more learning opportunities than you.

IMSA costs egos! Do you agree?

What does it **cost** parents to send their children to IMSA?

Honestly, it **costs** our parents their children.

It's not like parents want to send their best kids away to boarding school. I grew up in a family who lived by the adage that if you continue to misbehave, you're going to be sent away...away to military school...or to live with your dad...you'll be sent away...far away. My brother, the good one at home, was never threatened to be sent away!

At IMSA, our students are the best, and it costs parents their children to attend IMSA. Parents have to give up control (-well, some parents try to keep control from afar... you know who you are!)

Parents pack their children's clothes and send them off to boarding school. Occasionally, they get to see their child, celebrate holidays and vacations...and become painfully aware that their child has matured, grown, and left the house for college three years earlier than expected.

Parents become pre-mature empty nesters!



Personal Reflections

6/8/2017

Going to IMSA costs parents control, and the time to be with their children!

Do you agree?

What does it cost IMSA employees to work at IMSA?

Honestly, it also **costs** our staff to work at IMSA. Our staff, resident counselors and faculty have the opportunity to work with the best and brightest students in the state, helping them to develop into mature human beings who will "advance the human condition."

Here's what it may cost them:

- Limited or no salary increases,
- Unbearable heat and cold at times, and
- Days without sunlight because of the lack of windows...IMSA is called a bunker for a reason!

More importantly, it **costs** us, (me included) our hearts as we develop relationships over the course of three years with our students; and come to even love our students!

Is the education received at IMSA worth the cost?

I ask you Class of 2017, is the education that you received at IMSA worth the cost-the sacrifices-the hard work and sleepless nights?

Well, was it worth it?

You betcha!

The IMSA education you received over the past three years is more than what you "pay for." You received problem-solving tools. You became a decidedly different learner. You received training on how to think like a scientist, a historian, an author, a speaker of another language, a mathematician, a musician, or an artist. You became a person seeking to be an innovator, an entrepreneur focused on social impact, a leader, a public servant...you received training in all of these areas.

You also developed maturity, deep life-long friends, **and potentially found your mate for life...**

What you received at IMSA is...well...priceless!



Personal Reflections

6/8/2017

As I begin to wrap up, I want to remind you that our mission is to "ignite and nurture creative, ethical, scientific minds that advance the human condition." For the past 30 years, IMSA has lived out our 30-year anniversary theme: **Think. Different. Act. Bold.**

Let me end my remarks by returning to that first commencement speech given to our Charter Class in 1989 by our founder Dr. Leon Lederman.

This is how Dr. Lederman began his graduation speech to the graduating class of 1989. I quote:

"I considered a number of snazzy subjects for my remarks to you today:

- *The Unexpurgated Story of the Big Bang*
- *The Unbearable Lightness of Neutrinos*
- *Symmetry, Complexity and the Origin of Eagle Foods*

I then said: this is a serious period: and a whole host of charges come to mind: for example:

- *Get rich so you can contribute to IMSA's Endowment*
- *Get so rich you have an unlisted telephone number*

Or

- *Don't go to college – instead, go to Paris,*
- *Fall in love with two people at the same time*
- *Meet a Zen Buddhist and take him to lunch"*

Dr. Lederman went on to say, "But then what was bothering me surfaced: What so many of you have is so unique and this is independent of academic prowess."

Listen up, Class of 2017, because this statement applies to you as it did to our first graduating class back in 1989,

"What is so valuable is what I call 'the clarity of vision that reflects the unencumbered young mind.'"

Dr. Lederman explained:



Personal Reflections

6/8/2017

Well, remember the parable of the Emperor's New Clothes? For scientists that story, in retrospect, raises goose pimples: the child saw the truth. The child was free of dogma, of inculcated beliefs or prejudices. The child blurted it out –

'Mom, the Emperor is naked!'

This is why most of the great breakthroughs in physics and math were made by people in their teens and early twenties-their minds were still unencumbered by the body of knowledge that would soon constrain their clarity of vision.

Class of 2017... let me say, I am proud of you!

Always take IMSA with you as you embark in your next journey and in your future success.

Thank you!

It was wonderful to see our 213 students receive their diplomas and medallions at the Paramount Theater on June 3, 2017. Please join me in congratulating them and welcoming them to alumni status.

Have a wonderful summer and stay in touch!

Sincerely,

José M. Torres, PhD
President