

**REMARKS BY PETER R. ORSZAG**  
**RENSSELAER POLYTECHNIC INSTITUTE (RPI) COMMENCEMENT**  
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President Jackson, Provost Palazzo, Chairman Heffner and the Board of Trustees, the Deans and assembled faculty -- thank you for bestowing on me this honorary degree.

I am humbled to be here with my fellow honorees, and it is a privilege to share this day with you -- the RPI Class of 2010.

Graduates, you sat through the lectures. You completed the lab work. You made it through LiTech, Dynamics, or dissertation defenses. You braved the winters. You braved the hockey line. You logged your hours at the library and had your fill of 3 AM Pizza Bella. You've made the journey from Freshman Hill to Senior Week or from first-year grad student to PhD....

So let's just pause and state the obvious: you did it! Congratulations.

And let me also congratulate all of you not in cap and gown today....because one thing that has not changed since the very first RPI commencement in 1826, is that every student needs support to succeed.

I did my research, and in the 1820's, student expenses included 18 cents a week for laundry, \$1.50 a week for rent, and about \$4 a term for "chemical substances"....for lab work, of course.

Today, let's just say that the expenses are a little bit higher.

But then and now, each graduate had behind them parents and grandparents, family and friends who not only helped to foot the bill, but also encouraged and cajoled...who were there when the experiments didn't work or the paper was not yet written...who offered a word of encouragement or a shoulder to lean on when it was most needed.

For all that they have done to help get you here, let me join the Class of 2010 in saying to all of you -- all the mothers and fathers, brothers and sisters, grandparents, aunts and uncles, husbands and wives; boyfriends, girlfriends, and best friends: congratulations -- and thank you.

Class of 2010, you are about to join the ranks of RPI alumni -- individuals who literally built America -- from Ferris wheels to Fenway Park; from the transcontinental railroad to the Brooklyn Bridge... individuals who changed our lives by putting TV's in our homes, GPS in our cars, the "@" symbol in our email, and -- most importantly from the perspective of my 8-year-old son -- Guitar Hero 5 on our Wii's.

As you look ahead to your careers in architecture, business, public service, science, or engineering...lives in which many of you will help create the technologies that will shape our nation and our world for decades to come...let me use the privilege of being your commencement speaker to offer two pieces of advice: first, be empirical; and second, be resilient.

First, be empirical.

By this, I don't mean to ignore theories – because without theory, it is much harder to understand the world around us. But I do mean to apply these theories with a certain degree of humility and to check them against the evidence.

As the great scientist Richard Feynman once said: “It doesn't matter how beautiful your theory is; it doesn't matter how smart you are. If it doesn't agree with the experiment, it's wrong.”

This is especially true when it comes to the intersection of science and human beings....because whenever and wherever people are involved, the allure of pure mathematical elegance can lead us badly astray.

Let's take my own field of economics as an example. For years, the dominant theoretical framework in economics was that people behaved as rational super-computers who carefully weigh costs and benefits and ultimately do what is optimal. I bet many of you were taught this in Econ 1200 here at RPI.

By this classical economic account, you are sitting here today, about to graduate from this elite institution because sometime back in say fourth or fifth grade, you recognized that if you studied hard, you would get high marks, and that would lead to admission to a good college, and that would lead to higher incomes and so on and so forth.

Or more precisely, you concluded that the distribution of outcomes with more education stochastically dominated the distribution of outcomes with less education.

Knowing RPI, some of you understood what I just said – when you were in the fourth grade.

But looking back on your lives, I think most of you would agree that this rational assessment of costs and benefits is not quite how you wound up with a cap and gown today.

Instead, there were a host of factors, most especially including the norms of those around you, that excited you about computers, engineering, or science...people around you who made it clear that doing well academically was not just a necessity, but actually “cool.”

It's insights like this that have led behavioral economists to better understand everything from why we eat too much popcorn at the movies to why we don't save enough for retirement...from why we don't conserve energy sufficiently to why we don't exercise as much as we should.

And we are able to take this evidence – and act on it to tackle some of the biggest problems we face.

The bottom line is that as you move forward in whatever fields you pursue, always try to square the theory with actual observations.

Ask the tough questions about the conventional wisdom.

Often, the result will lead you down unexpected paths – and lead to even bigger rewards.

And that takes me to my second piece of advice: be resilient.

When I was sitting at my own college graduation, I valued raw intelligence more than virtually any other human attribute.

Over time, I have learned instead that life has lots of twists and turns, and it's not smarts that matters most; it's resilience.

As Teddy Roosevelt once put it, we should “endeavor not to shirk difficulties but to overcome them; not to seek ease, but to know how to wrest triumph from toil and risk.”

It is this ability to overcome adversity that is perhaps the single most important determinant of a well-led life -- not only as reflected in external things such as how nice your house is, how lofty your title, or how large your paycheck – which ultimately will mean less to you than you might think now – but more crucially as measured by your own sense of self.

In other words, what is called a high “adversity quotient” – or “AQ” – is far more important than a high Intelligence Quotient or “IQ.”

You all have high IQs. And no doubt you are learning the value of a high AQ as well.

Some of you are the first in your family to graduate from college or earn an advanced degree.

Others came to the United States as immigrants – had to learn a new language and a new culture...or traveled far from home to come study here at RPI.

And all of you have had setbacks on the way to this day.

Yet, here you are. You have persisted. You have survived. And you have thrived.

And if you have learned how to adapt and overcome difficulty and pain, you are already wise beyond your years.

Now, I won't try to sugarcoat it. The labor market – while starting to recover, is still not strong. Too many of you – despite your world-class education and the skills you have – are headed home without a job or headed back to school out of necessity rather than choice.

But as the Greek philosopher Epictetus once noted, everything has two handles – one by which it may be carried, the other by which it can't.

In other words, although it may seem little comfort at the time, I have found again and again in my own life that whatever setbacks or difficulties I have experienced have inevitably turned out to be blessings, even if they disguised themselves quite well for what seemed like an eternity.

So even in trying times, or perhaps most especially in trying times, rather than attempting to avoid risks and seeking false comforts, embrace risk and then adapt to the twists and turns that inevitably will follow.

The evidence shows that you can learn to become more resilient. In effect, you can raise your AQ. You can get through whatever life puts in your way.

In the end, and despite whatever short-term challenges you will encounter as a result, you will be more successful.

So, as you set out to write the next chapter of your lives, throw yourself at what you're doing; follow the evidence; take calculated risks; and find comfort in how you approach adversity – rather than trying to eliminate it.

And, almost by definition, you can't go wrong.

This resilience will empower you to try new things and posit new – or even radical -- ideas.

Ultimately, it is that stubborn refusal not to be deterred that has built America – that has made our labs, our universities, and our businesses the envy of the world.

And that is also what will prepare you for your own road ahead.

Class of 2010, today is your day; the future is yours; good luck, Godspeed, and congratulations.