

**Freshman Convocation**  
**Monday September 1, 2008**  
**Smith Center**

Good afternoon! It is a great pleasure to welcome you to GW. As a member of the class of 2012, you are joining more than 2,400 students from every state except North Dakota and Wyoming and from 47 countries. Among your classmates are a student who has climbed to the top of Mount Kilimanjaro, an expert dog sled racer, a unicyclist, and a young man who speaks six languages fluently. You are an accomplished, diverse, and energetic group, and it is an honor to welcome you to the GW community.

To parents and others accompanying students, I extend my appreciation for everything you have done to bring these bright, talented, motivated students to GW. They are among the most capable of their generation. Thank you.

Many of you heard me speak at Colonial Inauguration this past summer and last week, when I offered my views on the real purpose of a college education. I would like to expand on this theme today and talk about the ways in which I believe GW will prepare you for full and purposeful lives.

First, though, I want to talk briefly about the Olympic Games, which absorbed me as I am sure they did you. From the opening fireworks over the Bird's Nest to the closing gala, I was in awe. Watching these remarkable athletes compete in Beijing, I felt wonder not only at their athletic abilities, but at the power of the Olympics to unite individuals from nearly every country in the world.

The swimming competition held special meaning for me because I swam competitively in high school and college, and I have some sense of the degree of discipline, training, and sheer resolve it takes to win these grueling races. I found myself mentally "swimming" each Olympic race I watched. Like other Americans, I am thrilled that Michael Phelps

met his goal of winning eight gold medals. I am also a bit smug because I believe that GW may have played a small part in his success.

Experts say this amazingly gifted swimmer has the edge in what has become the sport's decisive motion: the underwater dolphin kick used at each turn. Here is how GW got into the race.

In 2003, coaches for the USA national swim team realized they needed to understand the underwater dolphin kick better in order to help team members use it to the maximum advantage. The coaches consulted GW Professor Rajat Mittal and his colleagues, who had been studying the way dolphins propel themselves through water, in order to help the U.S. Navy design small submarines. Dolphins are considered to be the best swimmers in the sea.

The GW researchers decided to compare the swimming techniques of the American team to the dolphins' motions. What they found was surprising.

It turns out that Michael Phelps swims more like a dolphin than do his team mates. He has dolphin-like flexibility, especially in his ankles, and can stay underwater for a long time. It also helps that he has flat feet and wears a size 14 shoe.

Most of the power of the underwater dolphin kick, Professor Mittal and the other GW researchers found, comes from the swimmer's feet. Now U.S. swim coaches are applying their knowledge to younger swimmers, encouraging them to develop flexibility in their ankles.

I hope that at some point during your studies at GW you will stop by to meet Professor Mittal and ask him to talk to you about his work. His office is just two blocks from here, on the seventh floor of Phillips Hall, in the Academic Center, where you will take many of your classes.

Rajat Mittal is just one of a number of professors at GW who can provide insights into the Beijing Olympics. I will name just two more and leave you to discover others on your own over the next four years.

Professor Lisa Delpy Neirotti at GW's School of Business is one of the world's foremost experts on the Olympic Games and has attended 14 consecutive Olympics over the past quarter of a century. She teaches a tourism course in the business school that examines the logistical, financial, and marketing aspects of the Games. Since 1992, she has brought GW students with her to each Olympic event.

This year's Games, Professor Delpy-Neirotti says, were a remarkable cultural experience. The beauty and attention to detail in the design of Olympic Park was remarkable. The Park was huge. Yet Beijing is such a vast city that the Olympic presence was not felt on the streets.

At first, access to the Games was carefully restricted to ticketholders. But on the last day of the Games, the Olympic green was filled with ordinary Beijing citizens. Professor Delpy Neirotti found the expressions on the faces of the oldest people, those who had lived through the Cultural Revolution 40 years ago, extremely moving. "Their lives have not exactly been rosy," she said. "but you could tell how proud they were." Although most of the students in Professor Delpy Neirotti's course are graduate students, it is possible to enroll as an undergraduate. I hope that one or more of you will take advantage of this unique opportunity.

I want to briefly mention just one more professor who can provide you with insights relevant to the Olympics – GW's David Shambaugh, professor of political science and international affairs and director of the China Policy Program at GW. Professor Shambaugh was in demand for commentary before and during the Games because he is an expert in contemporary politics in China. He teaches two undergraduate courses, International Relations of East Asia, and China's Politics and Foreign Policy, and is just one of several China experts at GW's Elliott School of International Affairs.

I encourage each of you to make the effort to meet Professor Shambaugh, Professor Delpy-Neirotti, and Professor Mittal sometime over the next four years.

This brings me back to the theme of today's talk – the meaning of an undergraduate education. What should you expect to learn during your undergraduate years?

Of course, one reason to attend GW is to be well prepared for the working world. This is important! An undergraduate degree prepares you for the world of work and helps you identify a career that is interesting and rewarding. But a bachelor's degree, in my opinion, has two other very important aims, and these are what I want to talk about in more depth.

First, through your undergraduate studies you will gain core capabilities that will equip you to tackle the challenges of life, in both your professional and personal lives. These capabilities do not involve facts per se. It may surprise you to know that I do not believe you are here at GW to learn a mass of information. Most facts are forgotten two days after the final exam.

I also am not talking about how to cook dinner, fix a flat tire, or stick to a budget, although I recommend these as important life skills as well.

The key capabilities that GW can help you acquire center around critical thinking, quantitative reasoning, and problem solving. These are the fundamental abilities that an educated person of the 21st century must have to navigate life successfully. I would add that in our global society it is also a good idea to become as fluent as possible in a language other than your own. I will speak very briefly about each of these capabilities and the ways in which you can develop them at GW.

Critical thinking. This is perhaps the foundation of an undergraduate education. Critical thinking impacts your ability to solve problems logically and to make reasoned decisions.

While a great many of the courses you take at GW will play a part in refining your ability to solve problems and make good decisions in a range of situations, GW's writing program is designed to hone these skills. As you have no doubt discovered already, all freshmen enroll in University Writing 20 or UW20 as we call it.

UW20 teaches thorough research, analytic thinking, and strong writing. I want to emphasize the importance of writing well. To write well about anything, from classical poetry to nuclear physics, you must truly understand the subject. And to truly understand anything, you must look at it from all angles, question conventional wisdom, and develop your own opinion. This is what it means to think critically and analytically about a topic.

In your UW20 class, you will learn how to do this. This foundation in critical thinking – together with the ability to communicate your thoughts clearly and convincingly – will serve you well throughout your education and your life.

GW's "Writing in the Disciplines" course, which you will likely take in your sophomore or junior year, continues this process by engaging you in intensive writing in an area of special interest to you.

Quantitative reasoning is the second important skill that you can acquire during your undergraduate studies at GW. A number of related abilities come under the umbrella of quantitative reasoning – computer literacy, statistics, the ability to read and interpret graphs and charts. You will need these skills to understand everything from your own taxes to an article in the newspaper about the troubles in the mortgage industry.

Education experts emphasize the importance of quantitative reasoning in today's ever more technological society. I encourage you to take courses in math and science, even if your major is literature or history. Math and the hard sciences provide practice in quantitative reasoning, analytical thinking, and problem solving.

A third important capability GW can provide for you is familiarity with a foreign language. I believe that we citizens of the 21st century should be familiar with a language other than our own. Europeans frequently speak three or even four languages. Those of you who already speak a second language know firsthand how much this ability offers. On a practical level, it is yet another marketable skill to have in your professional portfolio. More broadly speaking, learning a second language exposes you to a culture other than your own, which in turn expands your ability to understand the world around you.

GW offers courses in four Asian languages, as well as Arabic, French, German, Spanish, Portuguese, Russian, and Polish. What an opportunity! I encourage you to try a new language while you are here.

OK. I have talked about two basic purposes for an undergraduate education: to prepare for a profession and to acquire certain core capabilities.

There is a third purpose as well, one that derives from the first two. I firmly believe that college sets the stage for a meaningful life. During your undergraduate years, you have the opportunity to learn so much – and the more you learn, the greater will be your appreciation of the world around you. This will lead you to a deeper, more enjoyable, more purposeful path through life.

Over the next four years, sample a wide range of fields, from art history to physics to Shakespeare. It is tempting in today's fast-paced world to rush to select a major or to focus too narrowly on courses that lead to a particular career path. Do not give in. Instead, embrace the challenge of the new and different. Lovers of literature, be sure to study political science or art history. Future engineers, study Shakespeare and Faulkner.

It all comes down to curiosity. Cultivate your intellectual curiosity, and you will be a better and happier person. Here at GW you can learn how history informs the present. You can contemplate the deeper meaning of life in a philosophy class. And as I have

already noted, math and science will provide you with valuable skills that will make you a logical and creative problem solver in all areas of your life.

By exposing yourself to a wide array of subjects during your time at GW, you will discover many remarkable connections among seemingly dissimilar subjects and concepts. These connections enrich your appreciation of life and help you to be a more vital citizen of the world.

OK. I have given you a lot to chew on. Now I would like to return briefly to the Olympics. In the weeks leading up to them, we all heard a great deal about civil rights in China, the air quality in Beijing, and the impact of the Games on China's economy. Civil rights, environmentalism, economics. Right there you have three topics of great interest and relevance that you can study at GW. China is a growing force in the world. Perhaps I should expand my advice to the freshman class to include this simple thought: take at least one class that helps you understand China better. Perhaps you can hone your dolphin kick as well in one of our exercise science classes.

In closing today, I offer you my best wishes for great success. May you grow and thrive intellectually. And please keep in mind my advice during Colonial Inauguration: It is important to remain humble even as you become highly educated.

Thank you. Now it is my great pleasure to introduce GW's president, Steve Knapp.