

or a graduate degree. I know it was a lot of work, but it is well worth it. I also want to congratulate the proud, the relieved, and hopefully the not-too-debt-ridden parents. This is also your day for celebration.

Earning your degree is a milestone, a turning point—

On the news you will see the final glory of an athletic victory. However you will not see the years it took to develop the strength, the skills, and the endurance needed to achieve that victory. Work hard.

There are enormous inequities in our world with respect to opportunities, education, health, and wealth. The extent of these inequities is not getting smaller, but rather is increasing. This is true whether we are discussing the global condition or restricting the discussion to our own country. As graduates of an excellent University you are already in a privileged position. Learn to be generous. Security is an enormous concern within our nation, particularly since 9/11. We cannot have a secure world unless some of the enormous existing disparities of wealth and opportunities are reduced. You are aware of the many of the problems resulting from these inequities:

Why do we have only a short time to react to the increased rate of CO₂ production? Because it is an accelerating process. There are on our Earth areas known as sinks that normally absorb extra atmospheric CO₂. However, these regions of our Earth appear to be becoming saturated. In addition, in the permafrost of our far north, Canada, Europe, Russia, China and our polar region, the amount of frozen carbon is equal to the entire amount of carbon already present in our atmosphere. If this carbon is released as a result of melting, it will double the amount of atmospheric CO₂ in a very short period of time, making our problem of reducing atmospheric CO₂ twice as hard.

The problem is in front of us. The challenge is to do something about it. And we can. The good news is that it is not too late. The current trend can be reversed, but we must take action now. The sooner we start, the easier it will be. It will take coordinated efforts by all countries of the world. But since we are a major contributor to this problem we should be taking a leadership role in solving this problem, rather than lagging behind others.

What I am talking about are not programs of generosity, but are programs that are in our own best interest and in the interest of our great nation. It will take moral courage. I hope that future generations will look back on us and be proud that we had the moral courage to act. Past generations have done it for us, in two world wars for example, and the stakes are just as high now. However, now it has become a global issue.

The reason for discussing important issues such as global warming, is to encourage you to become concerned citizens. To have a well functioning democracy depends upon an informed and concerned citizenry. Education is a continuous process. Having just completed your requirements for a degree, whether a bachelor's degree or PhD, you are appreciative of the effort it takes to become informed on one topic. I encourage you to be active rather than passive citizens, at every level, from community, to state, to nation and now as a world citizen. It is not enough to vote, your voice needs to be heard, but you must also learn to listen and evaluate. Our political system often addresses short term concerns adequately, those that can be addressed within a voting cycle. But our government has more difficulties in addressing more complex problems that require more sustained efforts beyond one voting cycle and problems requiring cooperation between nations are even more challenging. However, as I have already pointed out because of the increased capabilities of our computer technology we can handle much more complex problems, even those involving multiple nations. Through the use of the Internet, the distances between people from different nations has decreased enormously.

We have not yet learned to be good stewards of our fragile earth. Future generations will be dependent on our actions or lack of action. When a crisis arises, I am always amazed at the ingenuity, generosity, and energy exemplified by humans. With the climate crisis we do not want to wait for the disasters to accumulate, by then it may be too late.

In summary, the advice that I want to extend to you is the same as I have given my daughter, Misha.

1. Find what you love, pursue it, and make it part of your vocation.

2. Work very hard; talent alone is not enough. Stretch yourselves, be bold in your pursuits.
3. Be generous. What you will cherish most throughout your lives are the interactions with your family and friends.
4. Be an active and informed citizen. Because of our ingenuity we have become the stewards of our planet. However, our resources are not infinite, our planet is fragile, and we have to learn to become good stewards of the planet and to live in harmony with it.

I believe that our problems can be solved and that your generation will help solve them.

But again congratulations to all of you, students and families alike. Thank you for having me as your commencement speaker. It is an honor. Good luck to all of you.