

**Speech by Professor Tan Chorh Chuan
President, National University of Singapore
at Commencement Dinner, 17 July 2009
University Cultural Centre**

Shaping Our Future, Celebrating Our Past

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Ngiam

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Graduands, Alumni and Friends

Ladies and Gentlemen

Good evening.

What a Commencement this has been!

The “Liveliness index” was certainly very high – led by the Social Work graduating class which cheered almost continuously for each other. One of our Deans was pleasantly surprised to be hugged on stage. And if you need conclusive proof, even the sale of the NUS Commencement Teddy Bears has been brisk. I keep a close eye on the teddy bears stacked up for sale every day and found that they were completely sold out over the weekend.

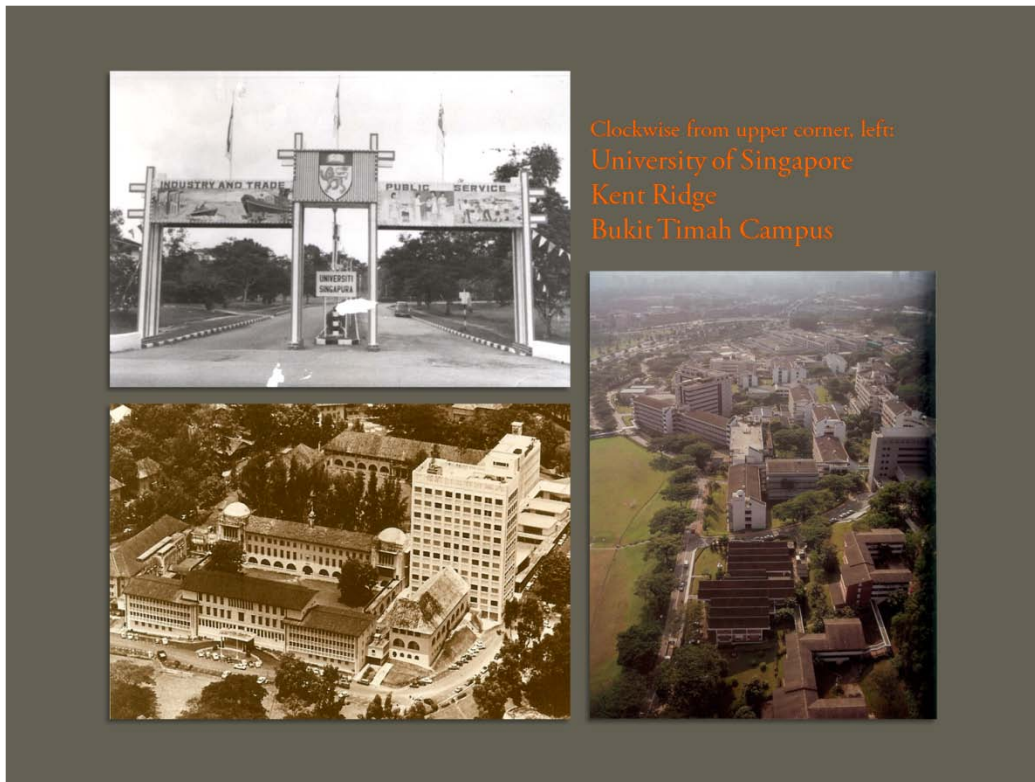
I am delighted that both the Liveliness and the Teddy Bear indices are doing well, because Commencement is a happy time, it is a celebration. We are happy for our graduands and their loved ones, and we celebrate our success in nurturing fresh talent for the betterment of society.

In my Commencement Speech this year, I spoke of 3 such graduates. Dr Chen Su Lan who graduated in 1910 was a doctor, a social reformer and philanthropist. Olivia Lum obtained a BSc (Hons) in 1986 and became a highly successful entrepreneur despite fierce odds. Jane Lee graduated from the Faculty of Arts and Social Sciences in 2007 and went on to lead an all-women's team to the summit of Mount Everest.

Their stories span nearly a hundred years. Yet the qualities they embody – Boldness, Resourcefulness and Spirit – are timeless, and part of the culture of our University.

Their stories also remind us that, for over a century, our University has nurtured countless graduates who are transformative leaders and agents of positive change in society.

As members of NUS, we must continue to have this strong sense of our history. For, without a sense of our history, how can we build institutional identity and pride? And without institutional identity and pride, how can we forge a collective vision of true excellence for the future?



So, for our new alumni, you are part of our history AND you are also a vital part of our hope for the future.

That future is likely to be very different, given the rapid pace of change in our world today. Tonight, I would like to reflect on what more we must do, as a university, to nurture graduates who will positively shape our society in a changing world.

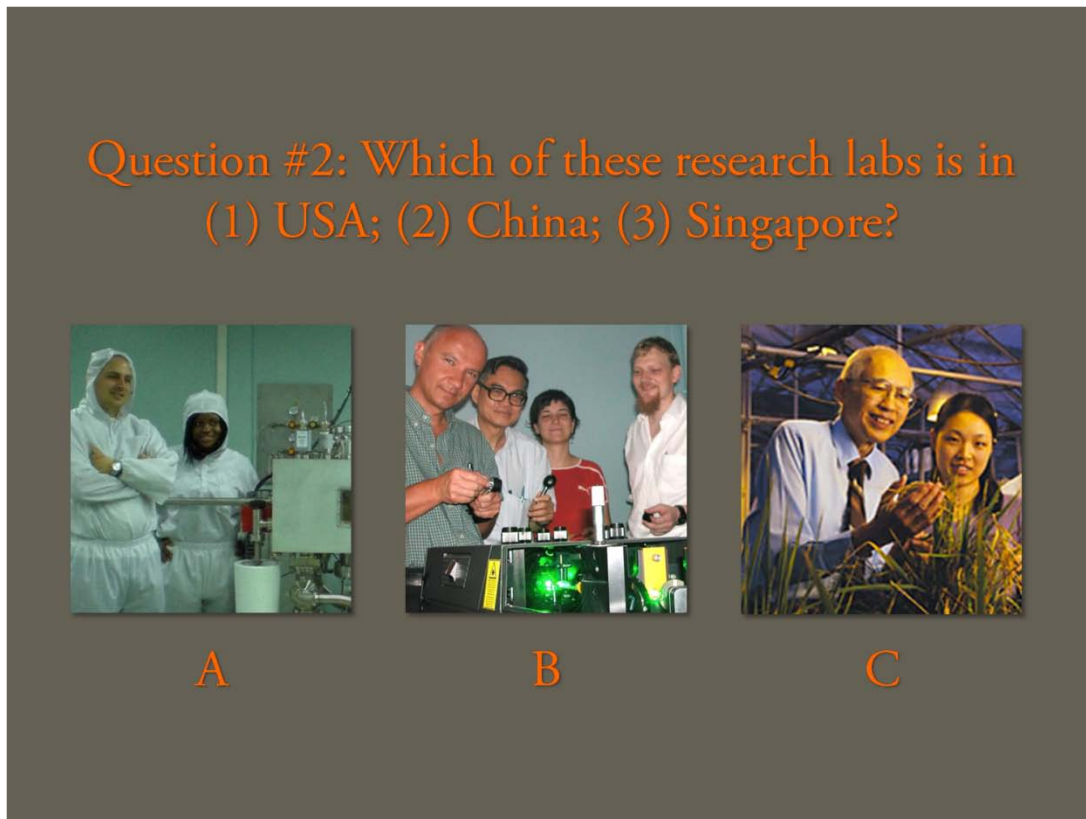
One obvious change is that we now live in a highly interactive world. So the next part of my speech will be interactive, and will require you to answer 3 questions:

The first question: In the US, on average, how many jobs would a college graduate have before he or she is 27?

According to the US Department of Labour report in 2008, the average US college graduate will have held about 6 jobs before age of 27, and 10 jobs by the age of 42. I

don't have similar data for Singapore, but my sense is that we are trending in the same direction.

The second question: The 3 pictures on the screen show 3 research laboratories – one is in the US, one in China and one in Singapore. Can you tell me, which of these labs are in which countries?



**Photo of Tsinghua's laboratory by the National Science Foundation & the University of California, Riverside; photo of Cornell's greenhouse by Cornell University. Both images reproduced with kind permission.*

We should disallow answers from the Faculty of Science since they should know that picture B is the Centre for Quantum Technology in NUS. Picture "A" is a lab in Tsinghua in China, and "C" is a lab in Cornell in the US.

The point is that our graduates should expect that, whether they are in China, Singapore or the US, they will be working with people of different nationalities, backgrounds and cultures.

The third question: What will be the three most in-demand jobs 10 years from now?

The answer is – nobody knows! Knowledge, science and technology are advancing so fast, that some of the most in-demand jobs in the future may not even exist today.

Think about the implications of these questions.

As a university, we would need to prepare graduates to be effective in many types of work, often in different sectors, in different cultural settings, and for jobs that may not even exist today.

How can we best do this?

Clearly, it will not be a matter of putting on more courses or piling on more content. Instead, we have to work more closely with our students, to hone the quality of the mind and person. Let me suggest a few specific areas.

The first is “critical thinking”. Critical thinking enables our graduates to arrive at well-reasoned judgments or conclusions, not just in their discipline, but more generally. In fact, it is often in areas outside of our main knowledge domains where critical thinking is most crucial.

Beyond critical thinking, is “thinking differently”. When our graduates study an issue, can they think about it quite differently from other people? If they can do so, they are more likely to come up with creative, even radical, new approaches and solutions.

Thinking differently often requires the re-examination of underlying assumptions. At other times, it occurs through reframing the issue. For example, many see the massive challenges in public health as medical issues that will be largely solved through advances in medicine. But we can also frame public health as a social and economic

issue. The reason is this: Unless we effectively address the areas of human behaviour and health financing, we cannot fully achieve optimal public health outcomes.

Like public health, many of the problems the world faces today are highly complex. We need many more individuals who can see the relevance of knowledge or ideas from different, even widely-separated, disciplines, who can establish new connections and perspectives.

This requires a sufficient degree of familiarity with a range of disciplines, and the habit of looking at a problem from differing angles.

Second, being responsible global citizens. Our graduates would need to work well with colleagues from different parts of the world, and be effective in diverse cross-cultural settings. They will be bombarded with so much information from around the world, it is tempting to just tune out. Yet, it is crucial for them to remain curious, and to care about the major changes going on around them.

I also hope that our graduates will look beyond their own careers, to be constructive members of Singapore society and the global community. There are many areas, big and small, where their talent and leadership can make a difference.

Third, being able communicators. Take a look at this paragraph written in the 1970s, which is shown on the screen. I will read it out in case you can't see it well.

“The Third World has the stamina to sustain pressure for the Common fund. Progress will probably be incremental with acceleration possible if moderation prevails”

If you can't understand what this means, you are in good company. This was an example of sloppy writing cited by then Prime Minister Lee Kuan Yew in a speech in 1979 on the importance of clear and simple written communication.

As highlighted by Minister Mentor then, writing and speaking well are founded on clarity of thinking. These are habits of the mind that can be cultivated. Being able to articulate sound ideas clearly should be a feature that defines our graduates. I would consider these as core skills for success.

There are already many programmes in NUS that seek to nurture these qualities in our students. But, we must challenge ourselves to do even more.

We must ask ourselves, how can we make NUS education truly transformative? As teachers, how can we better help our students cultivate these qualities? Does our learning environment challenge our students enough?

Well, in the spirit of my speech tonight, I will adopt the Socratic method. In other words, I have posed these questions in the hope of stimulating debate. And that the debate will lead to action that will enhance NUS education and make it truly transformative.

Because ultimately, we will need your collective ideas and energy, if we are to do even more.

To shape the future through our graduates.

To nurture graduates who can think critically, are responsible global citizens and able communicators.

Graduates, in the fine NUS tradition, with **BOLDNESS, RESOURCEFULNESS** and **SPIRIT**.

Thank you.