

**Speech by NUS President Professor Tan Chorh Chuan
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“The Aims of Education: Some Perspectives from Asia”

President DeGioia

Distinguished guests

Colleagues

Ladies and gentlemen

Thank you very much indeed for allowing me the great honor of being a part of this special ceremony.

I would like to express my heartiest congratulations to the newly promoted faculty, and the recipients of the outstanding research, and distinguished scholar teacher awards. Your achievements re-affirm the singular commitment to excellence which is the hallmark of truly world-class institutions like Georgetown University. You remind us that at the heart of a transformative education is the dedicated and inspirational teacher, and the special learning environment created by an academic community at the very leading edge of knowledge creation.

I would like to begin my remarks today with a back-packing story.

Some years ago, my wife and I visited the Angel Falls in Venezuela. To get there, we started at a village called Kamarata and traveled three days upriver by boat.

Our boatman was highly skilled – he picked the right passages up the rapids, driving the boat up between the rocks, against the strong currents.

After one exciting passage, I asked him: what was the most important thing he had to focus on.

He replied without hesitation: “Reading the water well.”

Like the boatmen of Kamarata, we too need, as educators, to try to “read the water well”. We need to discern the main currents from the eddies, understand what they might mean for us and then chart the best course forward.

The main **global** currents of higher education are relevant to all of us, regardless of the part of the world we are in. Some of these include:

The progressive internationalization of higher education¹;

Reports of big mismatches between the skills needed by employers and what graduates possess when they leave university², and;

How the nature of jobs may be fundamentally changed by technology³, and new trends like the “sharing economy”. This includes our jobs as university educators as the debate on online learning continues. In recent years, there have been many articles with encouraging titles like this one from the *Economist*⁴: “The digital degree. The staid higher-education business is about to experience a welcome earthquake.”

I do not propose to speak about these main currents. Instead, I would like to try to “read the waters” of higher education in Asia.

This is challenging because Asia comprises a very heterogeneous mix of countries with economies and higher education systems at very different stages of development. For example, the government expenditure per tertiary student in Japan in 2012 was US\$11,784, while that of India was US\$828⁵.

For a more contemporary comparison, we could use the iPhone Index compiled by UBS. To buy a new iPhone 6, a person in Tokyo would need to work for 40.5 hours, whereas a person in Mumbai would need 350 hours⁶.

With these caveats that my “reading of the water” of higher education will be necessarily broad and will not address the great heterogeneity within Asia, I would like to talk about three major currents there which I nevertheless feel merit attention.

Firstly, higher education in Asia is massifying at an unprecedented pace and scale.

For example, in India in 2012, 18% of students were enrolled in higher education and there are plans to increase this to 30% by 2020⁷.

The British Council estimates that by 2020, China and India together would have 65 million students in tertiary education compared with 20 million in the US⁸.

Why does this matter?

It matters because there is a prospect that millions of students in Asia would be able to realize their potential and achieve upward social mobility through education. This is provided of course, that the quality of university instruction is raised in the face of this rapid expansion. This is a challenge but it does open exciting new opportunities for Asia to innovate and to partner others, to raise the impact of its higher education sector.

There are also important implications for the global economic balance. The OECD projects that by 2020, the number of tertiary educated adults in China will be equal to the total working population of the US (195 million people) (OECD 2012)⁹.

For an institution like NUS in a small country like Singapore, we need to think deeply about how our graduates would be better able to contribute, excel and compete in such an environment.

Remember, just the top 1% of graduates from China today number over 70,000 per year. This is nearly twice the number of babies born in Singapore annually.

Secondly, a major priority in many Asian countries is to develop world-class universities.

A key reason is that many Asian countries see the world-class university as a necessary driver of more knowledge- and innovation-based economic growth.

This desire has resulted in substantially more public funding for selected universities in these countries.

South Korea has its world-class universities project, launched in 2008 with \$600 million¹⁰.

Last year, Japan unveiled its Super Global Universities thrust aimed at making its top universities more international and competitive.

But the largest investments have been in China, where a series of special funding programs have been directed at its best universities over the past decade.

Asian universities have also been actively learning and adapting from the best of US models, especially in recruitment; promotion and tenure practices; alumni cultivation; and fund-raising.

The example of Tsinghua University in China is instructive:

In 2006, its research budget was about US\$300 million. In 2014, it had doubled to US\$630 million¹¹.

Last year, Tsinghua also received its largest gift of US\$340 million¹² to establish the Schwarzman Scholars program, modeled after the Rhodes Scholarship in Oxford.

In the longer term, the scale and concentration of these investments will, if sustained, propel a number of Asian universities into the top league of global universities. Overall, this will be a positive development.

At the institutional level, though, each of us would need to consider how our own universities would continue to differentiate and to excel, within this changing global higher education landscape.

Thirdly, there is a growing interest in liberal arts education in several parts of Asia.

This is still a nascent trend, but one which I expect will grow over time.

In the case of my own university, our educational programs have shifted over the past two decades to encompass greater breadth, and teaching and assessment approaches that promote more interactive and critical intellectual engagement, together with a much larger emphasis on global education and experiential learning.

In 2008, the International Panel advising our Ministry of Education suggested that Singapore consider setting up a liberal arts college. As this was well-aligned with NUS' educational directions, we carried out studies which concluded that this would add a new and valuable dimension to NUS education. It would help nurture students who can think from first principles across a broad range of topics. We could also take the opportunity to pioneer approaches in liberal education that were contextualized to Asia. This would create a new option that was not available to very talented students from Singapore and the region, and enable NUS to attract more top students. Our hope was that the graduates would go on to become leaders with a multi-centric view of the world which includes a strong understanding of Asian perspectives.

In 2009, NUS and Yale University commenced discussions to jointly set up a liberal arts college in Singapore.

Why did we embark on this partnership?

NUS has had very positive experiences in partnering top overseas universities such as MIT, Johns Hopkins University and Duke University to establish new Schools and academic programs in Singapore. In each case, our goal was not to import an existing model of education. Instead, we wanted to work with our partners to use the opportunity of starting from scratch, to re-imagine and innovate, and to create new educational value propositions.

In my discussions with then Yale President, Richard Levin, in 2009, it was quickly apparent that both NUS and Yale were keen to innovate to develop a liberal arts program which might serve as a distinctive model for the future. Work proceeded apace and in 2013, the Yale-NUS College admitted its inaugural class of 150 students.

The common curriculum taken by all students in the first two years emphasizes a strong comparative approach to the intellectual traditions, cultures and contexts of the West and Asia.

We have also endeavored to build strong, purposeful linkages between in-classroom learning and experiential learning; and we have created new pathways for students

through double-degree options with NUS Law, as well as articulations into Masters programs in Yale and NUS.

While these are still early days, we have been very happy with the very high-quality students the College has attracted, and the excellent progress that has been made in developing a truly energizing learning community and culture.

In the process, we have gained many deep insights which are also informing further educational reform within the larger NUS.

Within Asia, the way in which liberal arts education is defined and conceived varies, as do the reasons for the growing interest in it.

As a broad generalization, the focus of much of higher education in Asia has been largely utilitarian, as most countries are in the earlier stages of industrialization. In several, early narrow specialization and a dominant emphasis on science and technology subjects have helped support rapid economic growth.

Another important consideration is that in many parts of Asia, the higher education systems are heavily influenced by Confucian educational traditions¹³.

A major aspect of the Confucian tradition is the powerful focus that individuals, families and society place on the value of education. I was once invited for dinner in China, at a place called the top-scholar restaurant. Its walls sported a series of murals of famous Chinese scholars through the ages, preparing for the imperial examinations.

One picture depicted the scholar Ju Yin who after studying all day, would capture fireflies in a gauze bag to allow him to study into the night.

Other scholars went even further. Sun Jing is famous because he tied his hair to the ceiling beam to prevent himself nodding off when studying.

Fortunately, the restaurant did allow less scholastically accomplished customers to dine there, so I was able to enjoy a very good dinner that night.

This tradition results in highly motivated students. However, education within the Confucian tradition tends to be delivered through uni-directional teaching, from teacher to student, typically centred around lectures. One reason, therefore, for the

growing interest in the liberal arts model, is that it provides a much more interactive and engaged way of learning.

In tandem with this, there is also growing appreciation across Asia that universities need to foster more critical thinking and creativity given the changing nature of work and society. In addition, the complexity of the issues of the future means that creativity would have to cut across boundaries, which may be intellectual, cultural or sectoral. Liberal arts education offers a means to nurture such creativity, as it is designed to encompass breadth, rigor, complexity and diversity.

However, in some parts of Asia, interest in the liberal arts model is often associated with a desire for greater local contextualization, as for example in China, which aims to develop world-class universities with “Chinese characteristics”.

In summary, the purposes of education vary, depending on the phase of development of the country and educational system, and the changing local context. While the waters of higher education in Asia read somewhat differently today, yet, there are interesting convergences with other parts of the world.

On my last day at the Angel Falls, we were treated to a magnificent rainbow. It arched across the sky towards some waterfalls where amidst the mist and spray, the end of the rainbow could not be discerned.

Each of us has the opportunity to read and interpret “the water”, to define the purposes that are enduring and the areas where innovation and re-imagination are vital. Within this diversity of thinking and experimentation, we will find ideas, inspiration and partnerships that will enable each of our institutions and global higher education as a whole, to grow stronger, and to keep creating distinctive value well into the future.

Once again, it is a great honor to be a part of this ceremony and to be able to share some thoughts with such a distinguished gathering of scholars and colleagues.

Thank you.

Professor Tan Chorh Chuan
President
National University of Singapore

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