

Keynote Speech by Senator Vivienne Poy
Survival in a Continuously Shrinking World
Council of Colleges of Arts and Science
Vancouver
November 3, 2005

President Abrahamse, distinguished scholars, honoured guests, ladies and gentlemen:

I would first like to thank Prof. Karen Gould and Prof. Julia Wallace for inviting me here today. It is indeed a great honour.

I wonder how many of you remember what the world was like about 60 years ago, at the end of the Pacific War. Maybe most of you are not old enough. There was no such thing as air conditioning or T.V., and - can you imagine - you had to put your hand out to signal when you wanted to make a turn while driving a car. I still remember seeing on the news at a theatre about the first escalator installed in a London department store.

As a child, my world was the British Colony of Hong Kong. All our close relatives lived either on the island of Victoria or in Kowloon. Whenever we had a family gathering, such as Chinese New Year or Christmas, everyone could attend. Distances people had to deal with were very short then. Crossing the harbour to Kowloon by car was something one did only occasionally, because of the long line-ups at the car ferry. That was before the first cross-harbour tunnel was built. The concept of one's friends or family living on another continent seemed almost unreal, due to the lack of technology. Making a long distance phone call was not an easy task; sending telegrams was the usual way to communicate. Most people had never been on a plane or on an ocean liner.

When I first came to Canada to go to university, USD\$1 was worth CAN90c. That was 1959. I was in residence at McGill University, in Montreal, and some of the girls in residence asked me where I came from, and these questions were always followed by, "What is Hong Kong?" and "Where is Hong Kong?" I realized that there was very little knowledge of other parts of the world, especially among young people because some of the

girls had never left their own provinces before going to university. By that time, I had already been to school in England, so I felt very cosmopolitan indeed.

As technology progressed, communications improved, and the world gradually became smaller. What I consider a big change was the invention of the fax machine in the 1980s. I bought my first one when I had my fashion business, and it revolutionized my life. Besides the convenience, I was saving a lot of money in courier services.

Of course, the other important invention was the computer, which has made irreversible changes in our lives. The fact that we can have instant communications over the Internet was unimaginable not that many years ago.

At the end of the 1990s, a couple of important events happened in our family. At that time, our youngest son was in China where he spent a total of four years. We emailed him to return to Canada in order to attend the functions with the rest of the family. By the time he rushed back for the second time, arriving at the front door with his suitcase, he said to me, “Mom, you think I live right next door instead of on the other side of the world!” It was then that I thought how small the world had become, and that was six years ago.

The world is not only small, figuratively speaking of course, it is shrinking continuously because of technology. The fact that we can have instant communication with a very large part of the world, by e-mail, by text messaging and cell phones, is a challenge to governments, as well as educators. How do you prepare the next generation to thrive in this environment?

Today, we don't think twice about talking to someone on the other side of the world, over the Internet or by phone, and we can do this rather cheaply. Similarly, corporations have no hesitation in outsourcing labour and services because it makes good business sense. For employees, outsourcing means competition in the job market of the world. On the other hand, CEOs of corporations have to get the best value, in the cost of services, labour and quality of production, for the profitability of their companies because they have to answer to their share holders.

Many of us shop at Wal-Mart, and we notice that a lot of its inventories have “made in China” labels on them. In 2003, Wal-Mart sourced \$15 billion worth of goods from China; last year, that amount rose to \$18 billion. China’s low-cost production of high quality goods has helped to propel Wal-Mart to the top ranks of corporate America.

On many of the labels of products we buy, ranging from clothing to electronics to souvenirs, we can see that China has become the manufacturing centre of the world. As Thomas L. Friedman said in his book *The World is Flat*, even the statuettes of the Virgin of Guadalupe, the patron saint of Mexico, are made in China, and imported into Mexico, even though Mexico has always boasted that it is a low-wage manufacturing country. This has not only made Mexico nervous, it has made many developed countries stop to think how globalization has affected their economies and their labour force.

While it is easy to read labels, not too many people are aware that Dalian, in Manchuria, is the “Silicon Valley” of China, where half of the residents have access to the Internet. It is situated in the N E of China, with a close proximity to Japan and Korea. Due to Manchuria’s unfortunate history under Japanese occupation, many citizens are also Japanese speakers.

Japanese companies first started some data processing there. Today, companies like GE, Microsoft, and Dell have their backroom work done there. Dalian has moved into R&D and software development. The city has 22 universities and colleges with over 200,000 students. These students are encouraged to learn English and Japanese, so that they can compete with their counterparts. The mayor of Dalian, Xia Deren, has said, “Today, the U.S....are the designers, the architects, and the developing countries are the bricklayers....But one day, I hope we will be the architects.”

It was a real eye-opener when a South Asian friend told me that a lot of medical diagnoses in the U.S. are made in India. An example are X-ray images that are transferred by satellite to radiologists in India for reading, and the results come back without the patients ever knowing that the diagnosis was not done at their local medical centres.

When we pick up the phone to trace our lost luggage from an American or European airline, or when we call to get help in solving our computer problems, as I have done many times, the chances are that the

person on the line is answering from a call centre in Bangalore, India. The call centres are staffed with young, intelligent and well-educated Indians, who are not only the cream of the crop, they can also adopt different accents, and even English names, so, again, no one would know that they are not your local computer support providers, or someone from your local airline office. How small our world has become!

Can you imagine Rolls-Royce, the quintessential British company, now employs about 50 nationalities, and outsources and offshores about 75 percent of its components to its global supply chain?

What about a company like Microsoft which has 3 research-centres worldwide? Its headquarters is in Redmond, Washington; another centre is in Cambridge, England; and Microsoft Asia opened in Beijing in 1998. Within a couple of years, the centre in Beijing has become the most productive research arm in the Microsoft system, and, to quote Bill Gates, “in terms of the quality of the ideas that they are turning out. It is mind-blowing.”

All the above is possible, not only because of globalization; it is also the result of the search for knowledge by some societies, as well as their governments, which in turn moulds their education systems. All educators have the responsibility to enable our future generations, not only to compete and prosper, but prosper for the good of our planet.

A lot has been said and written about the great economic and technical advances in the two largest countries in the world – China and India - and the fact that a large number of manufacturing jobs, as well as services, from large corporations worldwide are outsourced to these countries. This is not the place to discuss the pros and cons of outsourcing, so I will concentrate on what educators can do to prepare our future generations for the realities of life in the 21st century, when many jobs are going overseas.

One thing is sure – outsourcing is a fact of life, and many in power support it. Gregory Mankiew, the U.S. President’s chief economic advisor, has argued that if an object or a service can be produced more cheaply abroad, then Americans are better off importing it than producing it at home, and that trade protection won’t save jobs anyway. If these jobs don’t go overseas, they stand the risk of being automated.

Trade is always a two-way street. For every loss, there is a gain. I will give another example of Wal-Mart, which just opened its 46th store (its second super-store) in Beijing, adding a new store in China every month. CEO John Menzer said, "...consumer spending is exploding. The Chinese middle class is rising." The per capita disposable income in China's urban areas rose 7.7% in 2004 (\$1,140), and the country's retail sales rose 13% (5.4 trillion yuan). Last year, Wal-Mart Stores Inc. was again the largest US company for the fourth year in a row, and the Fortune 500 index gave Wal-Mart shareholders a 10% return.

Western countries are feeling the pinch in jobs going overseas. Public policy makers and educators should ensure that the younger generation has the education to match the demand for higher-skills jobs, jobs that are not easily outsourced. In other words, globalization is not the enemy. Instead, it is the catalyst for the creation of higher paying jobs, but it needs the support of parents, governments and educational institutions.

In order to deal with the issue, educational institutions have been innovating new ideas, not only at the tertiary level, but also in the secondary school system. It was very interesting for me to read in the British newspaper *The Times* about what the British government is doing with their secondary school system.

The British Education Secretary, Ruth Kelly, called it "parent power." The white paper gives parents a large amount of influence in reshaping their secondary schools. Ambitious heads of schools will be free to become "chief executives" of chains of schools. In other words, the British Labour government plans to use consumer pressure to reshape the quality of its secondary education in the public sector.

Globalization has changed the way we do business, provide services, and it has also brought about increasingly internationalized higher educational policies in our colleges and universities. This has resulted in an increasing number of international students enrolled in universities in the Western world.

The most ambitious, the brightest and the richest students from developing countries have been going abroad to study. In recent years, the largest growth in numbers came from China, with 38,000 in Britain alone, representing an annual growth of 50% since the late 1990s. Even Britain's

oldest university, Oxford, is planning to market itself aggressively overseas. Approximately 60,000 overseas students went to the U.S., but there was a decline in the last couple of years (2003-4) due to the difficulty of visa rules in America. Students going to Australia from China rose by 47% in 2003, and those from India by 52%.

In the U.S., higher education has been leading the way in the market-oriented model which is gradually spreading to the rest of the world. Increasingly, universities are regarded as the engines of the knowledge economy; some of the global research universities have achieved impressive successes in advancing knowledge, such as mapping the genome, or researching for a cure for Alzheimer. In the humanities, the recent record has been mixed, and we will come back to that later.

Even though *The Economist* named America the world's greatest marketplace for higher education, and according to the BankBoston Economic Department study, MIT graduates have founded 4,000 companies, created more than (1.1) 1 million jobs worldwide, and generated sales of \$232 billion, others are wondering whether America is investing enough for the future.

In the 2005 budget passed by the Republican-led Congress last November, the budget for the National Science Foundation, the U.S. federal body most responsible for promoting research and funding science education, was actually cut by 1.9% (\$105 million) while academic leaders have argued that the amount should have been doubled instead.

According to Friedman, America doesn't look so great compared to the India and China of tomorrow. He claims that there is a "quiet crisis" happening. In 15 to 20 years time, when America realizes that there is a critical shortage of scientists and engineers, capable of doing innovation or just high-value-added technology work, the crisis will already be upon them.

As a matter of comparison, since I am a Canadian senator representing Ontario, I would like to give you some figures for Canada, even though we are a much smaller country compared to the U.S. In the year 2000, \$900 million was set aside by our federal government to establish 2,000 Research Chairs, at our universities across the country, between the year 2000 and 2005. (Up to this June, 1509 chairs have been established). As for the Ontario government, the education budget was increased by 39% in 2005.

Yes, our public policy makers do realize that the future of our country lies in educating our youth.

Here are more examples of what other governments are doing, particularly in Asian countries because that is where a lot of our competition comes from. The Singapore government has set up an agency A*STAR by investing billions to promote biomedical science research, development and investment, with the aim of producing 1,000 world-class PhDs, at an average of \$1 million investment per person. By 2015, Singapore expects its biomedical manufacturing sector to generate \$25 billion in output, \$12.5 billion in value-added jobs, and employ around 15,000 skilled people.

The purpose of Singapore's far-reaching education reforms, which started a number of years ago, is to have a new generation of students who are more creative, questioning, more critical and more tolerant of taking risks.

Here is more news from Asia: do you know which high school constantly tops the SAT score worldwide? It's Karachi Grammar School, in Karachi, Pakistan. By the way, the country that has the fastest growing cell phone market is not China, but Pakistan, and the fastest growing stock market in the world is also in Karachi, Pakistan.

Clearly, for all public institutions, it is crucial to have government support because there is a race going on between the western world, and developing countries like China and India. It is a global competition to reach the top. And there is no time to waste.

We, as parents and educators, not only need to tell our younger generation that they have to be prepared to compete world-wide for the top jobs - the ones that are not going to be made obsolete; they must also develop life-long learning skills, and be adaptable to different kinds of work, and to varying situations throughout their lives. This is where the teaching of the Humanities is important. Unfortunately, it is also the discipline that is most often under-funded. I personally believe that all students should at least take some courses in the humanities, even if they are going to specialize in the sciences or the IT areas.

There's a lot of fear of outsourcing of manufacturing and services, but we must remember that our creativity, inventiveness, and our imagination

cannot be outsourced. Our technical training can easily become obsolete; not so our inventive minds or our creative thinking.

Our youth should realize that, with a solid educational foundation, they can create their own job description, and globalization has made it easier for any of us to live and work anywhere in the world. Mastering a few languages will give them additional tools for survival.

Whenever I see one of Jackie Chan's recent movies, such as "Rush Hour", I am reminded how small the world has become. Asian film producers and directors used to make films in Asia about Asians, and Western films were only about the western world. Whenever Asians appeared in Western films, they were characterized as exotic, dangerous or as "the other." All that's changed in recent years. Now, Asian producers and those from Hollywood collaborate in the global context, because of instant communication; we have moved into each other's neighbourhoods; our children go to the same schools; we compete for the same jobs and we learn each other's languages and cultures. A good example is the Toronto Film Festival, when the world comes together to celebrate the art of films.

I mentioned films, but the same goes for music, literature, fine arts, fashions etc. It is really limitless what our younger generation can do to create jobs for themselves, as long as they have imagination, and, hopefully, also financial support from their governments. Many countries support the development of their arts and culture, such as our Canada Council for the Arts.

Besides honing our skills and learning how to compete worldwide, what are the other parameters for survival in this shrinking world?

Our world has come to know that almost everything can be digitized, virtualized and automated, and these tools can be used for the good of humankind or for its destruction.

For the sake of our future generations, we need to teach our students to restore our natural environment, which means cleaning it up and keeping it clean; we need desperately to learn to live in harmony with each other.

I will first deal with the environment. I believe the biggest problem facing our world today is the inexhaustible demand for energy, which, at the

moment, means mainly fossil fuels. With the industrialization of a very large segment of the world's population – China and India – the demand for energy produced by fossil fuels is not the answer. Not only is this type of energy non-renewable, we will all be choked to death if we continue to use it in the way we do now.

To illustrate just one example of the demand: in Beijing alone, car sales from January to April, 2004, were almost 1,500 (1,375) per day. To look at it positively, it means that there is a very fast growing middle class in China. However, the cars that are available for purchase are the same ones that have been polluting the environment in the West, and the numbers being sold are increasing daily.

Because of industrialization in China and India, no amount of oil in the world would be enough for the demands of their manufacturing, their high tech industries, and their growing middle class. Alternative, clean, and renewable sources of energy will have to be developed. The Western world must take the lead in cleaning up their environment, as well as in research and development for clean and renewable energy. Western governments need to put resources in our universities and colleges, as well as provide tax incentives for industries.

Our world would be a much better place if China and India could skip the bad side effects of the Industrial Revolution in the West, and be able to move on to using clean and renewable energy to power their industrial engines. In fact, the high price of oil is giving great incentive to corporations to find new technological solutions, which in turn gives the world the probability of a major innovative breakthrough. At the moment, the greatest possibility is the invention of hydrogen-powered vehicles.

With China poised to take over from the U.S. as the country with the most cars by the year 2025, it will play an important role in determining global technological standards. Within the next 2 decades, a quarter of the OECD (Organization for Economic Co-operation and Development) vehicles could already be using fuel cells, and, because the demand will come increasingly from China, energy as well as car companies, will be willing to spend large amounts in research and development (R & D) if they know that they can mass-produce hydrogen-vehicles.

It may sound like a contradiction that China's growing weight in the global economy can help to revolutionize the world energy system. In fact, China's economy is expected to leapfrog on new technologies, possibly extracting methane and hydrogen directly from its indigenous coal resources.

All this is only possible because of the impact of globalization and internationalization of higher education, between the Western countries and the developing countries. Not only are students going from the developing countries to the West, there is also a trend that more and more are going the other way. Last year, there were 86,000 foreign students in China (35,000 from S. Korea; 16,000 from Japan; 6,000 from U.S.; 1,000 from Canada; 6,000 from Europe etc.). Beijing is hoping to boost that number to 120,000 within three years.

In China, the target is to regulate its educational system according to the criteria and mainstream of international practice. It is interesting to note that, two senior scholars from Beijing University, after observing undergraduate education in the U.S. in 1997 concluded that Chinese traditional values in education of encouraging students to help each other in learning may be helpful to university students around the world, encouraging them to cultivate a firm sense of moral responsibility and humanistic concern in an increasingly competitive and individualistic global society.

This view is reflected in a recent article in the *Globe & Mail* that at universities in the West, Chinese students are taught to be assertive, outspoken, confident and independent. When these students return to China, they find it difficult to work in a team which they are not prepared for. Interestingly, China, whose culture has always emphasized education, is currently educating its own innovators. Almost 30 million students – the size of the population of Canada – are studying in Chinese universities. Under these circumstances, I really believe East and West must learn from each other.

Education has reached the stage of internationalization that teaching can be done through local partners. This particularly applies to schools for business. An example is Chicago's Kellogg's Business School which has half of its students taught by local partners in places such as Israel and Hong Kong. The best example of internationalization is the Chartered Financial Analyst (CFA) Institute which used to be an American association. Even though its curriculum is taught by some 40 universities, the reading list and

curriculum are freely accessible by private providers. Its qualification has now become a global currency, and candidates can register, pay a fee of \$1,455, and turn up at one of 274 test centres around the world to write the exams.

Globalization and internationalization of education levels the playing field in the search for knowledge, meaning that there is world-wide competition for scientists, researchers, problem solvers and thinkers. And, instead of these numbers coming from the indigenous population of the West as in pre-globalization days, it is now possible to have a critical mass of brilliant minds to draw on, from every corner of the world. I just want to cite one example, and that is Dr. Hwang Woo Suk, a Korean veterinarian from Seoul National University, whose team became the first to clone human embryos capable of yielding viable stem cells that might one day cure countless diseases. I will not go into the ethical debates on this issue, but the fact of the matter is that he is highly sought after by major medical centres worldwide.

Medical research has the ability to make our lives easier, our health better, and let us live longer, but we won't have quality of life unless we are able to live in a clean environment, and in a peaceful world.

Today, we are dependent on fossil fuels, and these natural resources have brought great wealth to some countries that have them, but they are also a curse to many other developing countries, such as Nigeria, Chad, and Iraq. Exploitation by foreign powers has subjected the local population to a tremendous amount of suffering, just because of the abundance of their own natural resources.

To quote Timothy Hunt in the *Politics of Bones*, the paradox of multinational petroleum production is that it generates great wealth while generating even greater poverty. An example is Nigeria, which is the wealthiest country in Africa, and which wields significant political, economic, and military influence over its neighbours. Its economy has contracted, instead of expanded, over the last three decades. The country's absolute poverty rate (% of population living on less than \$1 a day) soared from 9% in 1970 to 46% in 1998. While Nigerians have been sliding into destitution, the political and economic elites of the country have grown ever richer.

Historically, as well as today, many wars have been, and are being fought, over the control of fossil fuels. Internationally, concern over growing energy dependency is giving rise to further political conflict. The U.S. Department of Defense worries that Beijing might enter U.S. spheres of influence, or that they might strike deals with states the U.S. has attempted to marginalize. Also, the Bush administration's disapproval of a possible pipeline project, connecting India with Iran's vast energy resources, shows us what can happen in the future.

The availability of clean, green and other renewable energy will not only make the world a lot safer from political conflicts, it will also alleviate suffering of a large portion of the world's population.

A shrinking world means it is progressively easier to trade, both in products, and in services, and international trade is a major incentive for peace.

Today, geographic distances no longer have much meaning because of technology. I will use Dell notebook as an example. It is co-designed in Austin, Texas, and Taiwan. When an order is received, it goes immediately to one of the six factories around the world to be assembled and shipped. This type of global business can only thrive and be profitable in an atmosphere of peaceful co-existence.

Governments of countries that want economic development to improve will avoid war at all cost. I would now like to give an example of how trade influenced the reduction of tension between China and Taiwan.

The majority of the population in Taiwan opted for peaceful relations with China during the election of the Legislative Assembly, held in December, 2004, because there is just too much trade at risk. Soon after the election, despite all the sabre rattling, the Chinese government took the path of reconciliation rather than that of military might.

What China did was announce the granting of Fifth Freedom rights to Pudong Airport in Shanghai. (to be done in 2 stages: for cargoes by the end of this year, and for passengers by the end of 2006.) Most foreign media didn't carry the announcement because they missed its significance altogether. In Taiwan, the news hit like a bombshell. In the headlines of the

Commercial Times on August 16 was, “Fifth Freedom Shock! Eva Air and China Airlines (Taiwanese airlines) stand to lose all advantages!”

Let me explain. Up to this point, Taiwan and China did not offer each other freedom in civil aviation, meaning flying across each other’s airspace. At the moment, Hong Kong is used as a trans-shipment point. Now, all of a sudden, the granting of Fifth Freedom means giving the right to an airline from one country to land in a second country, and then pick up passengers, and fly on to a third country where the passengers get off. Eva Air and China Airlines will lose their advantages because Taiwanese airlines are not allowed to land in airports in China. Not surprisingly, these two airlines are pressuring their government to change the no-landing rule which is exactly what China wanted. In order for Taiwanese airlines to have Fifth Freedom in Pudong, the Taiwanese government must reciprocate by allowing Chinese airlines to land in Taiwan.

China and Taiwan are each other’s greatest trading partners, with an increasing flow of goods and people, between the two. The Fifth Freedom card that the Chinese government played has put President Chen of Taiwan in a no-win situation. At the same time, tension has been diffused. This is only one example of trade promoting peace.

Can the world have more than one super power? Yes, we certainly can, but I have to qualify this by saying that I mean economic and not military power. Today, economically powerful countries are very interdependent in trade and services, and they simply cannot afford to go to war.

In a world where cell phones can take photographs and text messages, and instantly send to the other side of the world; where information can be posted on the internet and be accessible to hundreds of million people; those of the world’s population who are dispossessed can use the same technology to terrorize and destroy.

So, how are we ultimately to survive, even if we had clean air and no wars? Countries, as well as individuals, who have economic and technological capabilities, must help those in need in the under-developed and developing countries to improve their lives. No, I don’t just mean giving money even though it is necessary, I mean helping people to help themselves. A very good example is the work being done world wide by the Aga Khan Development Network, which alleviates suffering in many needy area of the

world by building schools, giving loans to the local population to start small businesses, as well as creating jobs for them. Aside from the Aga Khan Development Network, there are many generous individuals and NGOs out there, but we need many more.

I believe ethical behavior should be on top of the list when it comes to teaching. We must not lose sight of humanity because of profit, because that is where a lot of the world's problems come from. Students today need to know that each individual is responsible to everyone around us, precisely because the world is getting so small.

If you ask a child from an affluent background, anywhere in the world, what he or she would like to be as an adult, the answers would be rather similar, such as doctor, astronaut, lawyer etc. But, when a child says, "I want to grow up to be a suicide bomber," you know right away that there is something very wrong with the society the child lives in. It is our collective responsibility that every child in the world should have a reason to live, not a reason to die.

Thank you.