



'Education: Vision and Reality'

Professor Arthur K.C. Li

Former Secretary for Education and Manpower Hong Kong SAR Government

23 October 2007 **Menzies Oration on Higher Education**

Mr Chancellor, Mr Vice-Chancellor, Members of the University Council, distinguished guests, ladies and gentlemen,

First of all, let me congratulate today's graduates on the successful completion of the postgraduate courses you have taken. This is the result of your hard work and dedication in the pursuit of knowledge. Your parents and families must be very proud of you, for it is the degree of a most prestigious university in Australia that you have just received. Whatever plans you have for the future, I wish you well and hope you can put into practice what you have learnt with continuing success in the years ahead.

As for myself, it is indeed a great honour to have been invited to deliver the 2007 Menzies Oration on this auspicious occasion. Sir Robert Menzies was an outstanding Prime Minister and a distinguished alumnus of the University of Melbourne, who placed strong emphasis on education, particularly tertiary education. The rapid development of Australia's higher education sector owes much to his foresight,

and a lot of the pleasing progress achieved in science, technology and engineering and in many other fields in this country stems from his visionary leadership. No wonder Sir Robert considered that his contribution to the development of universities might prove to be amongst the most lasting of his achievements for Australia. Indeed, education now ranks after tourism as the second largest industry and foreign currency earner for Australia. The excellence of Australian education is borne out by the many non-local students who flock in from different Asian countries to further their studies down under. This has led to the internationalization of many university campuses, which no doubt will only benefit Australian education even further. For all I know, Hong Kong is Australia's fourth largest source of international students. In 2005-06 alone, Hong Kong accounted for over 21,000 student enrolments in Australian educational institutions.

Yet despite the very fine education one can receive in Australia, there are, I am sure, still grumblings and dissatisfaction within your community about education policy and practice. In an open and free society such as yours, this is not at all surprising, particularly as there is always room for improvement for any education system. People always remember with fondness their student days and lament that things are not what they used to be. But when we objectively compare the education delivered to our young people today with that of yester-years, we will notice a marked improvement

across the board. Some individuals tend to look only at their own circumstances and extrapolate situations across the board from their personal experience, which is misleading and not really correct. I also wish to add that any benchmark for quality education is always a moving goal post. That is why we always need experts to examine how we can lift our game to the next higher level. That is why we need to review constantly where improvements should be made. Fortunately or perhaps unfortunately, anyone who had some form of education becomes an instant expert, and is never loath to tell you about all the malaise in the system. In other words, there is always a gap between vision and reality; success is perhaps measured and judged by how narrow that gap is.

Let me relate a story once told to me by my wife. There was a community of animals who decided that education for their young ones was of great importance. So they put education as the top priority. They decided that what was essential for the youngsters to learn were competencies that could ensure survival. A total of four core competencies were subsequently identified: swimming, running, climbing and flying. At great expense, they employed experts in each of these areas to teach their off-springs.

After the first term, the ducklings were tremendous at swimming but very poor in running and climbing. The rabbits on the other hand were hopeless in swimming and flying but

excelled at running. The squirrels were great climbers as were the eagles superb flyers, but not much else.

So it was decided that in the next term more attention should be given to areas of individual weakness in order to raise the standards of the individuals. Despite tremendous encouragement and coaxing, the eagle could only manage to hop from branch to branch rather than climb. The poor rabbits and squirrels nearly drowned in deep water. The pounding that resulted from trying to run on a hard surface took its toll on the web feet of the ducklings, so much so that they just managed to achieve an average score even in swimming.

By the end of the year, the most outstanding student who scored well in all four core competencies was the snake. Meanwhile the dogs and badgers were not happy with the curriculum because they regarded burrowing as an important core competency. So they left and started their own school.

From this story one can see that a lot of good intentions could backfire. So even with a good, clear vision, there are still many pitfalls that would prevent our vision from becoming reality. On an individual basis, it is important for university graduates today to realize that, even though you hold similar degrees, each one of you is different. You might have been taught the same skills and acquired the same knowledge and even awarded the same diploma, but you alone know best

where your special strengths and weaknesses lie and it is up to you to maximize your own potential and develop your special talents to the full. Don't rely entirely on the system; no single system can accommodate the infinite differences in aptitude and ability among the students, or cater to every individual need for development.

Essentially education is a system whereby different aspects of our intellect can be developed and trained. The actual tasks of training and cultivation are carried out by the teachers.

If you have a good system with great teachers, you are onto a winner. If the system is bad and the teachers are incompetent, then you are onto a loser. But even if the system is bad, the status quo can still be maintained for as long as there are good teachers. On the other hand, if the teachers are inadequate, no quality education can ever be delivered however good the system is.

In other words, excellence in education depends more on the quality of the teaching staff than on the system itself, although a good system is indispensable if we want to attract or retain quality staff in the long run.

I am sure we still remember many of the teachers who taught us at university, especially those who were inspiring and

caring, even though as students we might have given them nicknames and told funny stories about them. However, I doubt if any of us would remember the names of our deputy vice-chancellors or sub-deans or care about how many of them there were at the university. Yet their jobs are just as important because it is they who help to shape our education system.

In order for an education system to excel, it must be able to attract and retain good staff. This is easier said than done because we have few benchmarks to gauge the quality of staff. For researchers, it may be easier because one could make an assessment based on the number of their publications or patents, the impact factor of their scholarly works and relevant citation indices. For teachers it is much more difficult. We all recognize great teachers when we are being taught by them but it is nearly impossible to define clearly what makes a teacher great.

Moreover, researchers have been taught skills and methodologies of conducting serious research, but hardly any university lecturer is ever taught the art of teaching. The future challenge must be to find ways to improve teaching, to identify outstanding teachers and reward their good performance.

Some German universities ask their graduates upon the third year of their graduation to identify teachers whom they regard as good and whose teaching they consider useful. They believe evaluation at such a point in time is fair because the conflict of interest is minimized: teachers no longer need dumb down any course to please the students. Moreover, within three years of graduation, students' memories should hopefully still be fresh!

There are a host of good qualities that people would look for in a teacher, which are supposed to contribute to inspiring teaching and effective mentoring. I believe one essential quality of a good teacher is his attitude, which should always be positive and open. One note of caution here: it is easy to pay lip service to motherhood and apple pie, but when it comes to the crunch and self interest is at stake, people tend to retreat to their comfort zones and keep the status quo. They might even start to argue about the role of motherhood in the modern world or how apple pies should be baked! Reform and changes are therefore never easy, but without them, there can be no improvement.

For instance, we all regard creativity as important and teachers always encourage the students to be creative and to think independently. But do we have the courage to face the consequences when the students start to exercise their independence of thought?

Let me tell you another story. It concerns a question in physics in a degree examination.

The question was: "Describe how to determine the height of a skyscraper with a barometer."

One student gave the following answer:

"You tie a long piece of string to the end of the barometer and lower it from the roof of the building to the ground. The height of the skyscraper will equal to the length of the string plus the length of the barometer."

This unusual answer so incensed the examiner that he failed the student outright. However, the student appealed to the university authorities because he said his answer was indisputably correct.

The university authorities appointed an independent external expert to adjudicate. The external expert ruled that although the answer was technically correct, it did not display any noticeable knowledge of physics. So to be fair he called the student in and gave him five minutes to answer the question orally in a way that must show at least some familiarity with the basic principles of physics.

For a long time, there was complete silence. The student sat there frowning, deep in thought. The expert reminded the student that time was running out. The student replied that he had a few possible answers but could not decide which one was best.

“You’d better hurry up,” said the external expert.

“All right then,” said the student. “You take the barometer to the roof of the skyscraper, drop it over the edge and measure the time it takes to hit the ground. The height of the building can then be worked out by the formulae $H = \frac{1}{2}gt^2$ (height equals half times gravity time squared). But bad luck on the barometer.

“Or if the sun happens to be shining, you could measure the height of the barometer and set it on its end and measure the length of its shadow. Then you measure the shadow of the skyscraper. It then becomes a simple matter of proportional mathematics to work out the height of the skyscraper.

“But if you wanted to be scientific about it, you would tie a short piece of string to the neck of the barometer and swing it like a pendulum, first at ground level and then on the roof of the skyscraper. The height of the building can then be worked out by the difference in gravitational restoring force ($T = 2\pi$ square root of l over g)

“Or if the skyscraper has an outside emergency staircase, it would be easy to walk up and mark the skyscraper with a pencil in barometer lengths and then add them all up together.

“If you merely wanted to be orthodox and boring, you could use the barometer and measure the air pressure on the roof of the skyscraper and compared it with standard air pressure on the ground. By converting the difference in millibars into feet and you will get the height of the skyscraper.

“But since we are constantly being exhorted to be creative and exercise independence of mind, undoubtedly the best way would be to knock on the janitor’s door and say to him, ‘If you would like a nice new barometer, I will give you this one if you tell me the height of the skyscraper.’ ”

Now if you were the examiner, would you fail this student?

The University of Melbourne has a fine tradition of research and teaching excellence and has produced many illustrious alumni. Besides ground breaking research, members of your faculties have been commended for their outstanding leadership and innovation in teaching, and dedication and enthusiasm for student learning. Your system has enjoyed great success and is certainly not faulty. However, to meet the

challenges of a forever changing environment and increased global competition, where human capital will be at a premium, the system is being revamped and education reforms known as the Melbourne Model are being introduced. I know that much time and effort has been spent to craft a broad vision known as the Growing Esteem Strategic Plan. And starting from 2008, when students of the University of Melbourne pursue their New Generation Degrees, core programmes will be complemented by breadth subjects so that they will not only achieve a deep understanding of their respective disciplines but also appreciate the broader contexts in which their knowledge and skills can be applied. Practicums and hands-on work experience will be provided during the final year to help them synthesize different strands of their undergraduate learning and prepare them for work or further studies at the postgraduate level. The Melbourne Model will also emphasize student engagements with organizations outside the University through internships, student exchanges, community and volunteer work, study abroad programmes, and participation in international research initiatives. All this is geared towards the cultivation of world-class graduates and active global citizens. This is indeed an exciting time for all members of the University. But how would the University bring this vision into reality and ensure the success of the reforms?

Earlier on in this talk I mentioned words such as benchmarks, quality, and goal posts. All these are related one

way or another to the word 'standard', which carries different implications when put into the context of education reforms. Reformers may want to consider carefully these 'standards' in order to be successful. What do I mean?

Standard has a host of different meanings. It can mean, for example, an ensign or a flag as in 'royal standard'. In this sense, a standard symbolizes a rallying principle or a specific cause, something people are ready to defend, support, pay allegiance to, or even die for. It is just like your triple helix of research, learning and knowledge transfer, which symbolizes what you cherish and what you want to achieve. It represents your reform objectives, your convictions and education ideals. It is your *standard*, to which all of you subscribe and are totally committed, irrespective of what difficulties may cross your path. No reform will ever be successful without such a standard. I am glad you have it.

Reform inevitably brings in uncertainty and worries for some people for it ushers in changes and will upset the status quo. In the realm of education, this warrants special attention because reforms are long-term investments and will not yield immediate returns that are easily discernible. This brings us to another important definition of standard, which means "*typical*", as in 'a standard hotel room' or 'standard operating procedures'. Reformers are alerted to the need to guard against extremes or radical departure from the existing mode,

and to stress a down-to-earth and evolutionary approach, always bearing in mind that problems should be dealt with patiently, one after the other as they crop up.

Standard can also refer to a unit of weight or measure to which others conform or by which the accuracy of others is judged. In other words, a standard is a basis of comparison. Such units of measure are usually the result of arbitrary choices that create a commonly used metric to describe the quantity or quality of matters. In the context of education reforms, they refer to the different tools for us to measure the outcomes of the reform efforts, be they the basic competency of the students, the academic attainments of universities, or the graduate employment rates of nations. Without such standards of measurement, reformers will not be able to define how much progress they have achieved or where they are heading towards.

The fourth definition of standard is the degree of excellence required for a particular purpose, or the level of attainment needed to receive some type of license recognition or acknowledgement, such as the permission to drive a car or a university degree. For any reform to be successful, we need to rely on people of quality: quality teachers, quality administrators and professionals. It is essential that those who have a role to play in education reforms be up to the task all the time. We expect them to have attained a specific level of

competence to do the job well. At the same time, we expect those at the receiving end of the reform to be able to pass the test before they are awarded diplomas and degrees. We cannot afford to relax our standards in the implementation of any reform. High standards are necessary to reflect the value of the education we offer and validate the worth of our reform.

So far most of the definitions of standards of education that I have given pertain to measurable quantities or qualities. However, in education, decisions or changes are often made not solely on objective measurements but on *judgment*. This is by far more complex and difficult to define when applied to the formulation of strategies and the implementation of reforms. We must not forget the human element. Education is not only about erecting faculty buildings, lecture rooms and laboratories or setting examinations. It is about people. Students, lecturers, professors, parents and employers all have their very different backgrounds, concerns, interests and expectations. In bringing your education visions and ideals into practice, you need to take into account the human factor and communicate well with all the stakeholders. You not only need to explain clearly what you do, but also why you do it. The more you get your message across, the easier it is for you to win understanding and support.

I have no doubt that faculty and staff at the University of Melbourne will ensure the success of this bold venture. I am

gratified to see that you are ready to embrace change and smooth out the wrinkles of reform, fully realizing that it will ultimately benefit the students and the community at large. One cannot contemplate any alternative but total commitment to success.

I am sure that with a good system and excellent staff, the University of Melbourne will scale new heights of excellence in the decades to come. I wish you all the very best.

Thank you very much.

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