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Subject: (Embargoed) Speech by RAdm Teo Chee Hean, 7 Apr 2000, 9.00 am

Singapore Government

PRESS RELEASE

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**ADDRESS BY RADM (NS) TEO CHEE HEAN, MINISTER FOR
EDUCATION AND SECOND MINISTER FOR DEFENCE AT THE
JOINT OPENING CEREMONY OF EDUCATION 2000
CONFERENCE AND THE LEARNING METROPOLIS
EXHIBITION ON 7 APRIL 2000, 9.00 AM, SUNTEC CITY
BALLROOM**

“THE LEARNING MOVEMENT”

APEC Education Ministers,
Your Excellencies,
Distinguished Guests,
Colleagues,
Ladies and Gentlemen

Introduction

I wish to extend a very warm welcome to all of you, and to extend a special welcome and thanks to my colleagues, the education ministers from the APEC economies who are here with us today.

National Archives of Singapore

The Education 2000 Conference and The Learning Metropolis Exhibition are timely as they help educationists re-envision education for the 21st Century. While the Ministers from the various economies exchange views and draw up broad policy guidelines at our APEC Education Ministerial Meeting, it is appropriate that education professionals have a parallel opportunity to share ideas and experiences at a conference and exhibition designed for them. The theme of the Education 2000 Conference: “New Leaders, New Schools, A New Future”, encapsulates the hopes that we place upon education and educationists to devise appropriate strategies and systems to provide our peoples with the knowledge and skills to build better lives in the coming years.

The Challenges of the Knowledge Economy

Globalisation and rapid technological change have heralded the advent of the knowledge economy. This poses enormous challenges to education planners, policy-makers and school leaders. The body of knowledge is growing exponentially. There is a stream of new discoveries in the fundamental sciences, about our planet and the universe, and in the nature of life itself. There is an avalanche of new processes and inventions. One indicator of this is the significant growth in patent activity. In 1980, 62,000 patents were granted in the United States alone. In 1990, it was 90,000. In 1998, the number was 148,000.

Ironically, being prepared for the knowledge economy does not mean acquiring more knowledge. Instead, a change of paradigm is required.

A new paradigm

The venerable Encyclopaedia Britannica started life in 1768. Many of us would remember its beautiful leather-bound volumes displayed proudly in libraries, and some privileged homes and offices. Possession of a set of the encyclopaedia meant having access to much of the collective wisdom of the world, as seen through the eyes of the many outstanding contributors to the encyclopaedia and its editors. Each year owners of the Encyclopaedia would wait expectantly for the handsome yearbook that would bring them up to date with the happenings and discoveries of the previous year.

The explosive growth of knowledge, the emergence of multi-media encyclopaedia stored on CD-ROMs with updates on the Internet, and the proliferation of on-line databases and search engines, have completely and irreversibly changed the model of the Encyclopaedia Britannica. Last October, the Encyclopaedia Britannica went live on the Internet. Just as the publishers of the Britannica have had to re-invent themselves, so too will countless others in what might be called the traditional knowledge industries – publishers, librarians, book-retailers, writers, and teachers. Many new opportunities will be created for new knowledge workers for whom we have yet to invent names and job descriptions.

Re-conceiving Education

Educationists will need to re-conceive what the goals of education should be. There will not be enough curriculum time to teach all the knowledge there is to know.

We will have to shift our concept of the end-product of education from one which focuses principally on the acquisition of a body of knowledge by the young, to one in which we also pay attention to the process by which *all* members of society, young and old, learn. In other words, it is also important to learn how to learn. This is how education can prepare our people to work and live in a fast-changing world. But it is also a more difficult task. It requires us to make fundamental changes in the way we do things. In short, we need to re-learn the learning process.

Re-Learning the Learning Process

To begin this journey of re-learning how to learn, we will need to thoroughly re-examine the process of teaching and learning. First we need to identify the fundamentals and make sure that our students absorb them well. These fundamentals provide the foundation for future learning. There is beauty in simplicity. Basic foundational knowledge includes both hard skills such as literacy and numeracy, and also softer attributes such as basic values and attitudes for growing up as a good citizen and a good person. These are simple things, but often difficult to do well. In this regard, it may be better to trim down the curriculum to provide more time to ensure that the basics are done right, than to try to do too much within a given time.

Second, provide specific opportunities for re-skilling. Graduands and school leavers need specific skills and knowledge that are in demand in the economy so that they can secure good jobs and contribute to economic development. However, in this age of rapid transformation, we need to acknowledge that such skills can become obsolete very quickly. But we still need to teach them. Consequently, we should structure our education systems so that graduands can return again and again for re-skilling and upgrading. A good example is a course in Information Technology. For a student taking a 3- or 4-year course, the general principles he acquires will remain relevant, but the specific skills that he learnt in the first year of his course may well have become outdated by the time he graduates. Such is the pace of change in some industries.

This brings me to the third point, equipping our students with life-long learning skills. Because there is just too much for anyone to learn everything, and because the specific skills that one learns can quickly become obsolete, perhaps the most important thing to teach students is to learn how to learn. This includes knowing when and what to learn, having the passion and desire to learn, and having the skills to internalise new knowledge independently. This has implications on how teaching and learning is structured. Once the focus shifts away from giving a student as much knowledge as possible within a given time, to providing him opportunities to learn how to learn, a change in the traditional forms of teaching is required. The learning process needs to be structured so that students habitually have to seek knowledge for themselves. Teachers have to inspire by example, and ignite the fervour to learn in each student.

See with New Eyes National Archives of Singapore

Preparation of our students for the knowledge age requires educationists to *see with new eyes*. In Internet language, we need to change our browsers. We see the world with a certain frame of mind, born of personal experience and what we have been taught. Our assumptions become so much a part of ourselves that we are not aware of them. We need to change between our telephoto lens and wide-angled lens to get a different picture. We need to be aware of the wider landscape so that when we zoom in on our particular area of emphasis or expertise we keep the bigger picture in mind.

Form learning networks

Educationists should also maximise learning opportunities through the formation of *learning networks*. The illustrious and diverse audience we have here this morning is a good example of networked learning. We have with us distinguished participants of the 2nd APEC Education Ministerial Meeting, and over 1,000 guests, speakers and participants of the Education 2000 Conference.

No one person, institution or economy has all the answers. We hope to tap on the collective wisdom of a community of learners. We want to borrow one another's lenses to see with new eyes and to establish learning webs.

Education 2000 Conference

The Education 2000 Conference organised by the National Institute of Education brings together 1300 school leaders, academics and senior education personnel from the APEC economies and beyond. Together, you will be exploring how new concepts and values in educational leadership can be best utilised to prepare school leaders for tomorrow's challenges. Very aptly, the theme is "New Leaders, New Schools, A New Future".

I hope this Conference will whet your appetite and inspire a continuing dialogue among educationists and education administrators. The organisers have told me that the participants will discuss 'borderless classrooms', 'global connectivity', 'connected learning communities', 'digital velocity' and much more. They will also hear about stories of success from schools in Australia, Canada, Malaysia, Singapore, the USA and other APEC economies. There will be workshops run by principals, teachers and students to share their successful experiences.

The Learning Metropolis Exhibition

The Learning Metropolis Exhibition organised by the Singapore Ministry of Education is the largest education exhibition held in Singapore so far. Some 50,000 Singaporean and overseas visitors are expected over the next five days. The exhibition will feature tangible ways in which schools and institutions of higher learning in Singapore are realising the vision of "Thinking Schools, Learning Nation". There is even a market place, set up by the private sector, where you can sample the latest educational learning resources, equipment, books and courses.

Singapore INSTEP

Singapore is fortunate to be able to play a small part in bringing together different learning networks through the hosting of three important education events in this month – the APEC Education Ministerial, the Education 2000 Conference and The Learning Metropolis Exhibition.

In March next year, we will be launching the Singapore International Science Teachers' Programme, or Singapore INSTEP for short. This is an annual programme to promote Science education and provide an opportunity for science teachers from around the world to work together and learn together.

Up to 20 Science educators will be invited to attend the three-week residential programme. They will be paired with local teachers and attached to schools. Senior education officers and curriculum specialists will brief them on the key aspects of the Singapore education system and discuss issues in science education. Other highlights include visits to institutions of higher learning and research laboratories, and educational tours of the science centre and nature reserves.

Conclusion

In closing, let me wish all of you a fruitful time in Singapore as you engage in an exciting learning journey with one another.

It is now my pleasure to declare the Conference and The Learning Metropolis open, and to invite our guests to join us in viewing the various exhibits.