Good morning Prof Lim Pin
Ladies & Gentlemen

I am pleased to join you at the opening of today’s conference on e-Education.

In the last decade, we have experienced rapid advances in information technology which have created unprecedented changes in the way we live, work and play. The growth of the Internet, e-commerce and telecommunications have created tremendous opportunities and challenges for both societies and economies. Singapore is fortunate that we have been able to ride on this wave of innovation and to harness its potential to further our development.

Today, Singapore is one of the most IT-driven economies. And in terms of household Internet penetration, we are among the top three countries in the world. We have been able to achieve this mainly because of a good infrastructure, our relatively compact size which makes it possible to achieve high levels of connectivity and our proficiency in the English language, the lingua franca of the virtual world.

From early on, we saw the opportunities that these new technologies could offer, and encouraged their growth in both the public and private sectors. The public sector has invested heavily in infrastructure such as a high capacity and reliable telecommunications backbone, and in supporting systems and service delivery systems to improve service to the public. And to encourage the private sector, various incentives and schemes, such as accelerated depreciation for tax purposes have been introduced.

IT is also having a profound effect on education. IT is one of the most powerful enablers which facilitates learning and administration. The landscape of our schools today is vastly different from that which we were familiar with during our own schooldays. Visit any school and you will see students accessing the Internet from PCs along the corridors, in the classrooms and the library. Art lessons are conducted with digital software rather than paint and brush. Students may even pay for their meals in the school canteen with a smart card or cash card rather than cash.

IT has opened up the world of education. It provides new tools for teachers and the students. And it opens up the whole world of knowledge and allows teaching and learning to take place beyond the traditional boundaries and resources of the school.

The Internet can provide inquiry-based learning where questions are answered by the most proficient people in the field. It also allows enormous scope for discussions and exchange of views, facilitating multi-disciplinary research, and collaboration across different fields, and between researchers and students across geographical boundaries.

With students now having much greater flexibility in when, where, what and how they learn, learning can be extended beyond the traditional classroom. For instance, a Barbados track and...
field competitor, Fabian Rollins, was able to continue with his classes at Eastern Michigan University while attending the Summer Olympics in Sydney. Being one of the institutions that tap on to Denver-based eCollege.com, Eastern Michigan University can allow Rollins to carry on with his graduate-level coursework despite the distance, and amidst his busy training and competing schedules.

9 In Singapore, our institutes of higher learning have also introduced online learning opportunities for students and working adults. Singapore Polytechnic’s ‘Virtual College’ was started a few years ago. Temasek Polytechnic’s Online Learning Environment offers computer-based courses for its students and the public to develop work place skills. The NUS has developed the Integrated Virtual Learning Environment, an online courseware management system that supports teaching and learning over the Internet. There are also numerous private courseware developers who have moved actively into e-education. UNESCO estimates that in 1999 there were approximately 80 million students enrolled in higher education programmes world-wide, of which 6,150,000 programmes were on-line. The rise of the “virtual university” will result in greater mobility in the delivery and sourcing of coursework.

10 E-education will definitely change the way people learn in the 21st century. While these initiatives expand the learning resources available and allow students and working adults to access them at their own time and convenience, we should also bear in mind that e-education is not just about putting content on-line. We could instead be looking at developing a “hybrid technology” of education that combines features of classroom education, computer-based training and on-line education. Education is ultimately a human enterprise and the challenge for educators is to make the most innovative use of these new technologies to help students obtain access to learning, and appreciate the joy of learning using the new tools available.

11 Singapore is a small country. It’s survival and prosperity depend on it being able to make itself useful to the world. The widespread use of the Internet, email and other advances in telecommunications will hasten the pace of change and intensify competition amongst firms and economies. In his book, “The Lexus and the Olive Tree”, Thomas Friedman gave an illustration of how speed is essential for survival in the globalised economy. He said that fifteen years ago, when a new personal computer was launched, it would be phased-in first in the United States and a few months later in Europe, and eventually, it would hit India and the Middle East. It was assumed that the European and Asian markets were somehow shielded from what was happening in America. Now a new product has to be released at absolutely the same moment across the world. And if Intel announces a new chip and people read about it in their newspaper or on the Internet, they expect to find it installed in the PC or laptop which they buy the very next day.

12 To compete effectively in such an environment, Singapore firms and the economy as a whole must stay nimble and be receptive and responsive to changes and trends in the external environment. E-education provides a good opportunity for Singaporeans to prepare themselves for the challenges they will face in the new economy. Through online learning, we can familiarise ourselves with new technologies at internet speed; speed up the process of sharing new ideas and adapt to the culture and spirit of the global economy.

13 I am glad that educators and industrial experts are gathered at today’s conference to learn from each others’ experiences in e-Education. I wish all of you a highly stimulating and fruitful conference, and take pleasure in declaring open this conference on e-Education: Environments; Effectiveness; Economics; Expectations.

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1 MCIT website.
2 Quoted from “E-EDUCATION: The RevolutioNext” by S M Nafay Kumail, Voice & data - the Communications Magazine (7 Jan 2000)