

SPEECH BY GUEST-OF-HONOUR, LG (NS) LIM CHUAN POH, PERMANENT SECRETARY, MINISTRY OF EDUCATION AT THE EDUCATIONAL RESEARCH ASSOCIATION OF SINGAPORE (ERAS) 2004 CONFERENCE ON WEDNESDAY, 24th NOVEMBER 2004, AT 9.00 AM, AT ORCHARD HOTEL

Director NIE

Prof Leo Tan

President Educational Research Association of Singapore

Associate/Prof Tan Oon Seng

Distinguished guests

Ladies and gentleman

A very good morning to all of you

Introduction

It is my pleasure to be here at this Conference organized by the Educational Research Association of Singapore. The theme of today's conference - "Innovation & Enterprise: Education for the New Economy" - is both timely and relevant.

Importance of Innovation & Enterprise

Rapid political and technological change around the world will pose new challenges at the same time as they generate new opportunities for the next generation of Singaporeans. Our young must be prepared for a more dynamic and unpredictable future that is fluid, borderless and highly competitive. They must learn to think for themselves, use their imagination, be prepared to try and have the resilience to bounce back when they suffer setbacks. Increasingly, they must also be motivated by their intrinsic passion and interests, and not just by seeking extrinsic rewards. These are the Innovation and Enterprise attributes that we want our students to have and which we know will stand them in good stead for the future. As educationists, we must develop in all our students these I&E attributes so that they will have the confidence and capacity to seize opportunities and bring Singapore to greater heights.

To develop the innovative capacity of our students, schools themselves must be innovative and be prepared to go beyond the tried and tested to potentially better ways of equipping our young for the future. They must demonstrate the same qualities of inquiry, creativity, initiative and risk-taking that they seek to nurture in their students. In other words, teachers need to be leading their students by example.

To broaden the experience base of our teachers, we have put in place the Teacher Work Attachment Scheme. This year, more than 200 teachers will be going for work attachment during the November and December months. This is more than 3 times that of last year when we first launched the scheme. Their attachments are to a wide range of organisations, both private and public, and from banking to defence industry. I believe that our teachers will bring interesting perspectives back to the classrooms to share with their students. Beyond Teacher Work Attachments, MOE is also providing additional teacher and financial resources to our schools to provide time and space for our teachers to reflect, to experiment and to simply spend more time with their students. In the next 5 years or so, MOE will be deploying 3000 more teachers to the schools or about 15% increase and allocate \$100,000 in manpower grant per school to enhance the schools' capacity. Taken together, this will set the stage for our teachers to be able to innovate and improve on what they are currently doing.

For schools and teachers to succeed in their efforts to explore new ideas to improve the learning experiences of their students, they must first have a strong sense of what works, for whom and under what conditions. This is why rigorous research in education is vital. Our efforts must be based on sound evidence and knowledge, not fad or opinion. Solid educational research is an important part of our efforts to ensure that education in Singapore is always in time for the future.

KEY AREAS OF EDUCATIONAL RESEARCH

We are therefore fortunate to have an active and vibrant educational research community. You undertake studies that have practical application and relevance to the educational needs of the day. This is reflected in the rich and diverse material that will be discussed at today's conference, where over 130 papers will be presented.

More broadly, we have made significant progress in three research areas of strategic significance for education in Singapore. These will provide a solid body of knowledge from which to enhance teaching and learning in our schools. These areas are firstly, a deeper understanding of how we can be more effectively bilingual – the learning of English and our mother tongue. Secondly, research on the teaching and learning of maths and science; and finally, how we can harness and leverage on the immense potential of IT. An example of the first two areas is the collaborative effort which is being undertaken by NIE and CRPP to understand the competencies of teachers of English, Mathematics and Science at the primary level. This study should provide us with insights to help us better develop specific teacher competencies. Another example is CRPP contribution to the work of the Chinese Language Review Committee, providing useful data and analysis which gave MOE a snapshot of teaching and learning practices in the Chinese Language classes. This preliminary snapshot provided critical inputs about what should be taught or emphasised. It also pointed to the need for diverse approaches to teaching based on the sociolinguistic diversity of students. Such research efforts are relevant, timely and useful in terms of the current reality in the schools and the changes that have to be made to improve learning and teaching of CL.

We are also conducting important research on IT. In 1997, MOE embarked on its First IT Masterplan. This is to equip all students with the IT skills so that they could plug into and leverage on the knowledge-based economy when they leave school. We have made good progress. Research into what we have done in IT will inform us if we are heading in the right direction, whether our investments in equipping schools

with both IT infrastructure and software as well as in providing training have made a difference to how students learn and the learning outcomes. On this, I understand that NIE is working closely with ETD to do research on the effective use of IT in teaching and learning. This research will help us understand the conditions needed to foster and sustain communities of practice that support on-going professional development and practices on educational innovations.

BEYOND TEACHING - RESEARCH IN THE CLASSROOM

The common factor underlying the success of these educational research efforts is that they are rooted in the day-to-day experience of students and teachers in schools and in the classrooms. They are not academic exercises. They are useful and practical studies that relate facts and concepts to the issues and challenges teachers face in the classroom. They contribute practical new ideas and solutions. They offer fresh perspectives and better answers. Looking ahead, we should permeate the salutary effects of rigorous research and scientific inquiry through the whole system, by encouraging teachers themselves to adopt the same frame of mind and rigour in research when they reflect on how they teach and experiment with new methods. Our teachers should test their own programmes and pedagogies, understand what works and what doesn't, and find out how to do better. They need to formulate their own hypotheses and experiment so that they can go beyond current practice, to more effective learning strategies. Many of our teachers are already doing so. It is very heartening to note that the number of teachers involved in research papers presented at this conference has increased almost ten-fold in the space of a year (from 10 teachers in 2003 to 96 teachers in 2004). The quality of their work is high. Their engagement in research has yielded solid practical ideas for classroom teaching. For example, two papers from Marymount Convent being presented at this conference show how we can configure more creative and interactive classrooms thorough the innovative use of technology and teaching resources. Papers from Geylang Methodist and RJC show how we can nurture a more inventive and enterprising mindset among our students. A paper from N7 school cluster looks at how collaboration between students from different schools on simple projects like

building a website about the Olympic Games can generate new opportunities for teaching and learning. Moving forward, it would be useful if more of our teachers were trained to conduct small-scale action research to evaluate the effectiveness of some of their innovative strategies or pedagogies. Here, ERAS can serve as the catalyst for nurturing a research culture in the classroom by training our teachers to undertake action research. These teachers will then be able to question assumptions and translate their findings into knowledge which can impact students' learning constructively. If our teachers are able to translate their ideas into productive pedagogies, they will be able to break away from the prevailing pathways of teaching and testing.

Indeed, they will be able to get closer to realise "Teach Less and Learn More".

CONCLUSION

In closing, I wish to commend ERAS for seeking to develop a spirit of I&E, and promote a culture of research in our teachers and principals. These represent excellent opportunities for ERAS to add value to its research role and function. These efforts will have a fundamental impact on the outcomes of our education system. We have achieved very commendable outcomes over the years. With the findings from research, we can do even better and we will also be better informed on how we can do better. On that note, I wish all participants a fruitful time at this conference.