



**NIE**  
NATIONAL  
INSTITUTE OF  
EDUCATION  
SINGAPORE

# Educating Global Citizens

CJ Koh Professorial Lecture Series No. 7  
Series Editor: Associate Professor Ee Ling Low

Writing & Editorial Team:  
Prof Fernando Miguel Reimers  
Chenri Hui  
Li Cai  
Joseph Junqi Lim  
Ran Ao  
Nur Haryanti Sazali  
James Gerard Sze Kai Teng  
June Poh Hoon Teng





## **Educating Global Citizens**

*CJ Koh Professorial Lecture Series No. 7*

A publication of the Office of Education Research, National Institute of Education, Singapore © 2016, NIE/NTU, Singapore

[www.nie.edu.sg](http://www.nie.edu.sg)

# TABLE OF CONTENTS

1.	Foreword by Series Editor	5
2.	Preface	7
3.	About the CJ Koh Professor Fernando Reimers	11
4.	Seminar in NIE	13
5.	Public Lecture	18
6.	Public Lecture: Q&A Session	22
7.	Reflections Part I by CJ Koh Professor	25
8.	Reflections Part II by CJ Koh Professor	29



## FOREWORD BY SERIES EDITOR



**IT IS WITH** great pleasure that I present to you the seventh volume of the *CJ Koh Professorial Lecture Series*—“Educating Global Citizens”. Professor Fernando Reimers was appointed the 11th CJ Koh Professor from 16 to 23 May 2015. Here is the consolidated report of the NIE Staff and Graduate Students’ Seminar and the Professorial Public Lecture given by Professor Reimers. The main objective of this report is to ensure that the rich and insightful discussions arising from Professor Reimers’ appointment reach key stakeholders within the National Institute of Education (NIE), the Ministry of Education (MOE), and the wider local and global educational fraternity.

The CJ Koh professorial appointments have been made possible through a donation of S\$1.5 million to the Nanyang Technological University Endowment Fund by the late Mr Tiong Tat Ong, executor of the late lawyer Mr Choon Joo Koh’s (CJ Koh) estate. The endowment funds the programme of the CJ Koh

Professorship in Education. An additional sum of S\$500,000 was donated to the endowment fund for the award of the Pradap Kow (Mrs CJ Koh) Scholarship for Higher Degrees in Education.

In the seminar entitled “An Education for the 21st Century”, which was held at NIE, Professor Reimers first shared some survey findings regarding people’s perceptions about values, to kick-start the conversation about the difference between educational improvements related to improving the effectiveness of the system and those related to enhancing the relevance of the system. Professor Reimers then moved on to discuss the independent trends of educational innovations and their convergences to redefine what education means in the 21st century.

In the public lecture entitled “Educating Global Citizens”, Professor Reimers covered topics including “defining a global citizen”, “preparing

## FOREWORD BY SERIES EDITOR

our people for future challenges”, “the global education movement”, “global competency” and “the challenges of global education”. In his lecture, Professor Reimers argued that the invention of mass public education was to empower ordinary people to improve themselves and their communities, and, in this way, achieve happiness. However, he challenged the proposition about whether education systems of today have indeed produced outcomes like happiness and whether grades as indicators are accurate measures of such intangible educational outcomes.

I would like to take this opportunity to thank all who contributed to this report in one way or another. Special thanks go to our NIE Director Professor Oon Seng Tan for his continued support of the *CJ Koh Professorial Lecture Series*, and to Professor Fernando Reimers for sharing valuable insights with us during his appointment as CJ Koh Professor.

This consolidated report would not have been possible without the excellent secretariat team which supported the writing from the first drafts to the final product. In this respect, our thanks go to (in alphabetical order) Mr Ran Ao, Ms Li Cai, Mr Chenri Hui, Mr Joseph Junqi Lim, Professor Fernando Miguel Reimers and Mr James Gerard Sze Kai Teng; and also to our wonderful colleagues from the Office of Education Research (Publications & Communications Unit) for their copyediting and careful proofreading work.

We proudly present to you the seventh issue of the *CJ Koh Professorial Lecture Series*—“Educating Global Citizens”.

**Associate Professor Ee Ling Low**  
**head, Strategic Planning and Academic Quality,**  
**nIE/nTU**  
**Series Editor, *CJ Koh Professorial Lecture Series***  
**May 2016**  
**Singapore**



# PREFACE

PROFESSOR OON SENG TAN



## Introduction

**I AM DELIGHTED** to pen the preface for this issue of the *CJ Koh Professorial Lecture Series*, which provides a very good summary of Professor Reimers' two talks on global competency and the education of global citizens. The two talks have one common theme—the proposal that the purpose of education is for global competency so that our people can become global citizens. Indeed, education bears relevance for global competency and we need to educate our young to be better local and global citizens.

## The Goals of Education

One of the most important messages from Professor Reimers is that amidst all kinds of education reforms and innovations, we need to ask ourselves the question: What are the purposes of education? This is critical to ensure that our efforts in education are aligned with the purposes that we value. It is a question of utmost interest to societies, communities and key stakeholders in education like school leaders, teachers, students and parents.

When we think about the goals of education in the 21st century, globalisation is a factor that we cannot afford to ignore and must take into consideration. Globalisation

is essential in the 21st century economically, culturally and politically. This is especially true for a place like Singapore, which is highly globalised and intricately connected to the world beyond its shores. Uncertainty, ambiguity, interdependence and integration are some of the defining characteristics of a globalised world. Events that take place overseas can affect us quickly and unpredictably, and these include political changes, disputes and armed conflicts (Lee, 2014).

As the world changes, so does our island city-state, Singapore. There are important changes in our social values, such as the increased importance of tolerance, as pointed out by Professor Reimers, who cited the results from the World Values Survey. The interests and opinions of people have become more diverse and deeply held (Lee, 2014). Meanwhile, Singapore is facing various challenges such as international migration, an ageing population and below-replacement fertility rates. As a result of migration and the rapid proliferation of social media, among other changes, we find ourselves having to interact with people of different national, cultural, ethnic and religious backgrounds in all spheres of our daily life.

# PREFACE

PROFESSOR OON SENG TAN

Globalisation can be a double-edged sword. On the one hand, it can bring unprecedented challenges, creating uncertainty and anxiety. On the other hand, it can signal an age of opportunity. For those who are bold and willing to take on new challenges, globalisation can become a driving force for imagination and creation.

Individual and collective responses to the challenges and opportunities brought about by globalisation are largely dependent on one's preparedness to understand and address them. Therefore, we must enhance the capacity of students to engage creatively with the challenges and opportunities so that they can not only survive but also thrive and flourish in this age. Otherwise, our capacity for inventiveness and entrepreneurship will remain unexploited and this will be detrimental to individual and societal futures (Hargreaves, 2001; Tan, 2015). Education for global competency, as proposed by Professor Reimers, is of particular concern to educators and policymakers all around the world. If done well, it can enable our youth to be collaborative, creative, responsible and concerned global citizens and creators of potentially better societies and a better world.

## **Global Competency and Educational Innovations**

Education for global competence is an essential educational improvement that lies at the heart of preparing our young children for the future world. Professor Reimers distinguished between two types of education reforms around the world that aim to meet the challenges of the 21st century—technical and adaptive improvements. Technical improvements are educational enhancements based on what can be measured, such as academic outcomes. Adaptive improvement refers to educational reforms that reflect the needs of the future world and societies. As Professor Reimers posits, “the best way to prepare students for the future is to equip them to invent it”, and the future of the world lies in preparing competent students who are able to “invent a future that appropriately addresses the global challenges and opportunities shared with their fellow world citizens” (2010, p. 183).

Professor Reimers analysed the independent trends of educational innovations around the world and their convergence on refining the purposes of education and its essential elements. Similar to the innovation efforts of UNESCO, OECD and the Partnership for 21st Century Learning, Singapore's initiatives to prepare its people for a globalised world has also set ambitious goals for education. A few common themes arising among these education reforms merit our attention. The first is the emphasis on education beyond academic outcomes. An overemphasis on academic scores is unhelpful and distracts us from the educational goals that we value most. Professor Reimers gave the example of Bill Gates, for whom the academic score of “Failure” given by a professor had no predictive value on Gates' future success as a global citizen at all. The second is the emphasis on values, which is a dimension of global competency proposed by Professor Reimers. The third theme is that global competency is a vast and complex construct that comprises multiple dimensions. It highlights the fact that knowledge and capacity in the new era are vast, global, multi-lingual and multi-contextual in nature (Tan, 2015).

Educating for global competency is not new within the Singapore context. Putting values at the core, Singapore has transformed its entire education system in line with 21st century competencies. Recent initiatives include the development of the 21st Century Competencies (21CC) framework, the Desired Outcomes of Education (DOE) and the Curriculum 2015 (C2015 by Ministry of Education [MOE]), and the Teacher Education for the 21st Century (TE<sup>21</sup> by National Institute of Education [NIE]). All these initiatives have the common aim of preparing students for the 21st century and an important emphasis on global competencies that converge with what have been proposed by Professor Reimers. For example, the core values articulated in the 21CC framework include core attributes such as respect, responsibility, integrity, care, resilience and harmony, which are not confined to



# PREFACE

PROFESSOR OON SENG TAN

Singapore as a nation but has currency in the world and humanity as a whole. The TE<sup>21</sup> framework emphasises the development of three key attributes of the 21st century teacher: Values, Skills and Knowledge (V<sup>3</sup>SK), which underpin all teacher education programmes at the NIE. TE<sup>21</sup> is values-driven, and encompasses global competencies such as multi-cultural literacy, global awareness, environment awareness, social responsibility and engagement, as well as innovation and entrepreneurship skills. Another innovative effort in Singapore's teacher education is the NIE–NTU Teaching Scholars Programme (TSP), which has a very strong emphasis on developing student teachers' global competencies. Learning within the TSP is not limited to classroom or laboratory settings, but takes the world as the classroom. The TSP experience is infused with service learning whereby student teachers identify needs and contribute to the community both at home and overseas, residential learning where they engage with international partners, and network with local and global educational leaders. In addition, NIE's Overseas Student Exchange Programme and the International Practicum are designed to enable student teachers to acquire global exposure.

## Challenges to Education for Global Competencies

There are a number of challenges to education for global competency. As suggested by Professor Reimers, the main difficulties include the design of a good curriculum, the capacity of educators and scalability that makes global competencies accessible to all students.

Teachers must be role models of desired global competencies. This is espoused by the saying “You are what you teach, and you teach what you are”, the then Minister for Education, Mr Heng Swee Keat, highlighted at the 2015 Teachers' Investiture Ceremony at NIE. To teach global competencies well, teachers must lead by first acquiring these competencies themselves and strive to be

the best they can be. If a teacher lacks certain attributes that we would like our students to have, it is less likely that he or she will be able to help students develop those attributes.

To educate global citizens, teachers themselves must be designers of the learning environment. This requires teachers to be reflective practitioners and thinking professionals. It would be unrealistic to assume that teachers will automatically learn how to respond to these challenges. What is required is a reconsideration of teacher preparation and professional development. TE<sup>21</sup> at NIE represents a step in this direction as it is a collective effort by key stakeholders in Singapore including NIE, MOE and the schools to enhance teacher education programmes so as to prepare “thinking professionals” for the 21st century educational landscape.

Additionally, professional dialogues where educators share, debate and discuss issues on education and citizenship education can be very beneficial platforms for teacher learning. At NIE's 2015 *Redesigning Pedagogy International Conference* held in conjunction with the *Arts, Humanities and Literature Conference 2015* and the *11th International CitizED Conference* in June, a prominent theme that emerged was that schooling means much more than academic outcomes since it encompasses the development of both hearts and minds. At the conference, teachers, scholars and researchers from local and international establishments discussed issues that were closely related to educating for global competencies such as dealing with challenging and contentious issues in the classroom, which, if not dealt with properly, can potentially cause tensions. However, an increasingly globalised world means that schools are not neutral learning spaces anymore and teachers can no longer be dispassionate dispensers of the curriculum (“Dealing with Contentious”, 2015). Delegates viewed that the qualities that teachers should have include values, openness, being fair and true to our beliefs, which echo Professor Reimers' conceptualisation of global competencies.

# PREFACE

PROFESSOR OON SENG TAN

Teachers will first need to be equipped with the skills to educate for global competencies. As suggested by our former Minister for Education, Mr Heng (2015):

Our teachers will need to have the knowledge, imagination and lively interest in Singapore and the world around us, to read up widely, to collaborate, and to stimulate students to imagine how every aspect of our life can be better, how we can forge a sense of common destiny and togetherness.

## Conclusion

Uncertainty and difficulties can only do two things: 1) stop us from achieving our dreams, or 2) force us to become creative. Our imagination and creativity can be used as tools for solving problems and difficulties. Mastery of global competencies can help us face our challenges and allow us to achieve beyond our limits. Our pioneer generation has set us a perfect example in how to surmount hardships and difficulties. Having lived through hard times of tension and conflict, the pioneer generation of Singapore built a harmonious, multi-racial, multi-religious and multi-cultural society. Faced with unrest, instability and great uncertainty, they chose to be the masters of their own lives. Forging ahead, we need to prepare our students for the uncertainties and opportunities that may present themselves in the future. As educators, we have the task of cultivating responsible, reliable and sensitive citizens who will not only strengthen Singapore's multi-racial and multi-religious society but who will also, ultimately, contribute to the betterment of the lives of others both in the local and global context.

## Professor Oon Seng Tan

Director, national Institute of Education, Singapore  
Nanyang Technological University

May 2016

Singapore

## References

- Dealing with Contentious Issues in the Classroom. (2015). *SingTeach*, Issue 53, 6–8.
- Hargreaves, D. (2001). Towards education for innovation. In D. Council (Ed.), *Changing behaviours* (pp. 21–29). London, UK: The Design Council.
- Heng, S. K. (2015). *Speech presented by Mr Heng Swee Keat, Minister for Education, at the NIE Teachers' Investiture Ceremony at 2:30pm on Monday 6 July 2015 at the Nanyang Auditorium, Nanyang Technological University*. Retrieved from <http://www.moe.gov.sg/media/speeches/2015/07/06/speechbyhengsweekeatatthenieteachersinvestitureceremony.php>
- Lee, H. L. (2014). *Prime Minister Lee Hsien Loong's National Day Message 2014 (English)*. Retrieved from: <http://www.pmo.gov.sg/media-release/prime-minister-lee-hsien-loongs-national-day-message-2014-english>
- Reimers, F. (2010). Educating for global competency. In J. E. Cohen & M. B. Malin (Eds.), *International perspectives on the goals of universal basic and secondary education* (pp. 183–202). New York, NY: Routledge.
- Tan, O. S. (2015). Flourishing creativity: Education in an age of wonder. *Asia Pacific Education Review*, 16(2), 161–166.

# ABOUT THE CJ KOH PROFESSOR FERNANDO REIMERS



**PROFESSOR FERNANDO REIMERS** is an expert in the field of global education. He is currently the Ford Foundation Professor of the Practice of International Education, the Director of the Global Education Innovation Initiative and the Director of the International Education Policy Program at the Harvard Graduate School of Education.

Much of his scholarship has been focused on the role of education in advancing opportunities for low-income and marginalised students around the world. His research and teaching look into how education policy, innovation, leadership and quality improvement relate to one another in order to support children and youth in developing the skills they need to thrive in the 21st century.

His current research focuses on the study of educational policies and programmes that develop 21st century competencies in a cross-national study. He has also studied the impact of entrepreneurship

education with youth in the Middle East and the impact of citizenship education programmes in youth in Latin America.

His writings have conceptualised and defined the profile of a globally competent graduate in the 21st century. His most recent co-edited publication is entitled *Teaching and Learning in the Twenty-first Century: Educational Goals, Policies, and Curricula from Six Nations*.

Professor Reimers is the Founding Director of the International Education Policy Masters Program at the Harvard Graduate School of Education, a programme focused on the development of innovative leaders committed to expanding global educational opportunity. At Harvard, he is a co-Chair of the Advanced Leadership Initiative, a Member of the University Committee on International Projects and Sites and of the Academic Computing Committee.

## ABOUT THE CJ KOH PROFESSOR FERNANDO REIMERS

He is a Fellow of the International Academy of Education (IAE) and works with education policymakers in the United States, Asia, Latin America and the Middle East. He is also a member of the US Commission for UNESCO and of the Massachusetts State Board of Higher Education and serves on the boards of various educational organisations including Room to Read, Teach for All, Global Cities Latin American Scholarship Program of American Universities, the Phalen Leadership Academies, Global Cities and Worldteach. He serves on other boards such as the China Fund, the South Asia Institute and the David Rockefeller Center for Latin American Studies.

He advises leaders of governments, foundations, educational organisations and international development agencies. Working with a Task Force of Ministers of Education of several countries in the Americas, he recently supported the development of an education strategy to advance the Inter-American Education Agenda agreed at the last summit of Presidents of the Americas convened by the Organization of American States.

Professor Reimers earned his Master's and Doctoral degrees in Education from Harvard University and obtained a Licenciatura en Psicología at the Universidad Central de Venezuela.

# EDUCATIONAL INNOVATION: MAKING EDUCATION RELEVANT

PROFESSOR FERNANDO REIMERS  
20 MAY 2015, SEMINAR, NIE, SINGAPORE



## Introduction

**AT THE CJ KOH SEMINAR** in NIE on 20 May 2015, Professor Fernando Reimers shared with NIE staff and graduate students on how educational innovations can make education more relevant in the 21st century.

He started the seminar by sharing some survey findings from the World Values Survey regarding people's perceptions about values as an overall backdrop to his discussion about the difference between educational improvements, viewed as improving the effectiveness of the system, versus educational improvement, viewed as improving the relevance of the system. He then identified some independent trends in educational innovations and their convergences with the aim of redefining what education ought to be. He concluded his talk by calling attention to the challenges of 21st century education and how 21st century education might be promoted in light of the findings of a study on civic education conducted by his team.

## World Values Survey

Education is a deeply contextualised enterprise to the extent that schools need to teach the values held by parents. However, schools should not only confirm things that society considers good, useful and important, but also produce a better future generation. To begin his discussion about what values schools should teach, Professor Reimers shared the findings of the sixth wave (conducted from 2010–2014) of the World Values Survey of people's perceptions of values involving Australia, Brazil, China, South Korea, Singapore, the US and many other countries (World Values Survey Association, 2010–2014).

With respect to perceptions of important qualities that should be cultivated in children, Singaporeans seem to attach more importance to independence, hard work and a sense of responsibility than to imagination, tolerance of and respect for other people, thrift, determination and perseverance, unselfishness and self-expression. For example, more than 60 per cent



# EDUCATIONAL INNOVATION: MAKING EDUCATION RELEVANT

PROFESSOR FERNANDO REIMERS  
20 MAY 2015, SEMINAR, NIE, SINGAPORE

of the parents surveyed thought that independence, hard work and sense of responsibility were important qualities for a child, while only around 19 per cent believed in the importance of cultivating imagination in a child. Professor Reimers viewed Singaporeans' low-perceived importance of imagination as a reflection of the gap between the educational goal of cultivating imagination in children and the expectations of most parents. Furthermore, this result may be a reflection of teachers' perceptions about the importance of imagination, because teachers are influential members of society whose views shape their society's culture. As for tolerance and respect for other people, 54 per cent of the parents felt that this was important for a child, a figure lower than the 70 per cent obtained in a similar survey a decade ago. This result of 54 per cent was also much lower than that of Australia and the US, which were about 86 per cent and 72 per cent, respectively. Professor Reimers stressed the importance of cultivating in children the value of tolerance of and respect for people of different backgrounds, because how we think of others who are different or who are perceived to be different is very important in the 21st century. With respect to thrift, such as saving money and things, around 47 per cent of Singaporean parents believed that this was important for a child, while about 44 per cent saw determination and perseverance as important traits. As for unselfishness and self-expression, parents in Singapore do not seem to believe much in the importance of these two qualities as only 26 per cent and 14 per cent, respectively, valued these traits in their children.

A comparison of the findings about what kinds of neighbours people would not like to have also suggests that adults in Singapore are less tolerant than their counterparts a decade ago. Only 12.6 per cent of Singaporeans were not comfortable in having people of a different race as neighbours, but this result is 5 per

cent higher than a decade ago. Around 36 per cent of Singaporeans would not like to have immigrants and foreign workers as neighbours, 10 per cent higher than a decade ago and 11 per cent did not want to have people of a different religion as neighbours. In the last run of the survey, Singaporeans seemed to be more tolerant than Americans, but this trend is now reversed in the current survey. Professor Reimers suggested that the reduced tolerance of diversity may affect the nation in matters such as attracting foreign investment, because foreign companies may prefer to invest in countries that are more tolerant of people of different backgrounds.

## **What Is the Purpose of Education?**

Drawing on results from the World Values Survey, Professor Reimers urged educators, especially education leaders, to think about what the purpose of education should be, and how to lead for effectiveness and relevance. He posited that there are two ways to think about education improvement. One way is to think in terms of improving effectiveness and efficiency, that is, how to get education systems to perform even better than they have already done. The standards-based reform, one of the dominant paradigms of education improvement in the US, is an example of promoting such improvement. The rationale for a standards-based reform is the belief that one can only improve what can be measured, such as in terms of outcomes. The standards-based reform is how most education systems understand improvement. However, there is a different way to think about improvement in education. The question ought not to be how to help schools do better in what they are currently doing, but to question the aim of schools. We need to think about how to prepare our students to meet the demands of the present and the future. It is not about how we can do better in achieving our goals, but about assessing whether those are the right goals. There is a fundamental difference between the two ways of



# EDUCATIONAL INNOVATION: MAKING EDUCATION RELEVANT

PROFESSOR FERNANDO REIMERS  
20 MAY 2015, SEMINAR, NIE, SINGAPORE

looking at improvement in education. The former is about technical improvement, while the latter is about adaptive improvement.

Professor Reimers then briefly talked about the different trends of educational innovations initiated by independent groups, one of which was the United Nations Educational, Scientific and Cultural Organization (UNESCO). One ambitious global process of consultation is the UNESCO International Commission on Education for the 21st Century (UNESCO, 1996). The envisioned four pillars for education in the 21st century are learning to read, learning to do, learning to live together and learning to be. Another example is the Organisation for Economic Co-operation and Development (OECD), which brought together experts from around the world to define the skills and competencies that people need in the 21st century. They reported that we must have a more expansive definition of what skills are needed in the 21st century. The OECD initiative led to the development of the Programme for International Student Assessment (PISA). In the US in the 1990s, there was also a study that looked at how schools could produce students with the competencies necessary for work in the economy of the 21st century. This endeavour led to the founding of the Partnership for 21st Century Skills in 2002 (now known as the Partnership for 21st Century Learning; see P21, 2015), a coalition of the business community, education leaders and policymakers. It also led to a series of large-scale efforts implemented by networks of schools to redesign schools. These networks strove to rethink what pedagogy and professional development should look like in the 21st century. Innovative efforts around the world also include education reforms in Singapore, where the education system has gone through four rounds of educational innovations with ambitious goals. For example, the latest round embraces the ambitious conception of what the aims of education ought to be:

anchored in values at the core and competencies that people should develop for citizenship participation, for active engagement, and so on (Ministry of Education, 2012). Singapore is also in the process of transforming teacher education and leadership development, and instructional materials to support the transformation of school practices.

The notion that character matters is not new. But in the context of standards-based reform, when we have developed better instruments to measure competencies and when the only thing we are measuring is competencies, it is easy to forget the “old” idea that good education focuses on a blend of academic excellence and character development. A major reason why many countries, including Singapore, have embarked on educational innovations is because we have swung too much towards one end of the continuum in emphasising cognitive abilities. Leaders need to think whether the country is well served by focusing solely on cognitive ability. It is important to remind ourselves that the instruments guiding innovations for the efficiency and improvement of schools are imperfect. To illustrate our tendency to forget the limitation of the instruments, Professor Reimers told the story of his son, who did not perform well in a test and he (the father) was upset. It was his son who reminded him that the test only measured what he had done on that day, that he was much more than the test. Using this example, Professor Reimers suggested that tests will reduce the worth of our children to their test scores, when children actually represent more than that piece of information. Therefore, we should be humble in acknowledging the limitations of existing instruments to guide our efforts in improving schools. Otherwise, we may miss the ultimate goal of education and jeopardise our efforts to lead schools into doing the right thing. We may produce people with less potential than they are capable of and who may lack fundamental qualities

# EDUCATIONAL INNOVATION: MAKING EDUCATION RELEVANT

PROFESSOR FERNANDO REIMERS  
20 MAY 2015, SEMINAR, NIE, SINGAPORE

essential for success in the 21st century.

To illustrate why we should be humble in acknowledging the limitations of existing assessment systems, Professor Reimers told the story of Bill Gates. When Bill Gates was at Harvard, a mathematics professor gave him a failing score, which hurt him and partly accounted for his dropping out. This example shows that the professor's score for Bill Gates had zero predictive value on his potential and capacity to transform an entire industry, and to make significant contributions to the economy and the social work landscape of the US and the world. It also indicates that many teachers may have hurt students by awarding marks using imperfect assessment tools that teachers take too seriously.

The world has changed drastically and this has, in part, been brought about by technology. For example, musician Dave Carroll's unhappy flight experience with United Airlines, whose baggage handlers broke his guitar due to carelessness, motivated him to write a song entitled "United Breaks Guitars". This music video, uploaded on YouTube, led to a change in the human resource policy of a national airline. The fact that a then little known musician could use the Internet effectively to lobby his cause makes us think about the qualities we should cultivate in students so that they can take advantage of powerful technology for the promotion of world peace and for the advancement of human development.

To prepare students successfully for global challenges such as threats to environmental sustainability and racial intolerance, education for sustainable development should go beyond environmental education towards an educational process of achieving human development in an inclusive, equitable and secure manner in all areas of life, including economic growth, social development and environmental protection, which are the three pillars of human

development proposed by the United Nations Development Programme. This vision of education entails education for poverty alleviation, human rights, gender equality, cultural diversity, international understanding, peace, and so on.

## 21st Century Competencies

In the 21st century, students need more than just cognitive knowledge. They need 21st century competencies which should cover three domains: cognitive skills, inter-personal skills and intra-personal skills. Each of these encompasses sub-level skills and competencies as listed below.

- Cognitive skills
  - Processing and cognitive strategies: critical thinking, problem-solving, analysis, logical reasoning, interpretation, decision-making, executive functioning
  - Knowledge: literacy and communication skills, active listening skills, knowledge of disciplines, ability to use evidence and assess biases in information, digital literacy
  - Creativity: innovation
- Inter-personal skills
  - Collaborative group skills: communication, collaboration, team work, cooperation, coordination, empathy, trust, service orientation, conflict resolution, negotiation
  - Leadership: responsibility, assertive communication, self-presentation, social influence
- Intra-personal skills
  - Intellectual openness: flexibility, adaptability, artistic and cultural appreciation, personal and social responsibility, intercultural competency, capacity for lifelong learning, intellectual interest and curiosity
  - Work ethics/responsibility: initiative, self-direction, responsibility, perseverance, productivity, persistence, self-regulation, meta-

# EDUCATIONAL INNOVATION: MAKING EDUCATION RELEVANT

PROFESSOR FERNANDO REIMERS  
20 MAY 2015, SEMINAR, NIE, SINGAPORE

cognitive skills, anticipatory skills for the future, reflective skills, ethics, integrity, citizenship, work orientation

- o Self-efficacy: self-regulation (self-monitoring and self-assessment), physical and mental health

## Challenges of 21st Century Education

Professor Reimers concluded the seminar by reminding us of the challenges of 21st century education in terms of design, implementation and scalability.

- Design: How to design 21st century education by taking into account objectives, content, pedagogy and assessment?
- Implementation: How to get support from parents, build the capacity of teachers and reconcile 21st century education with the current demands of schools?
- Scalability: How to ensure accessibility to and opportunity for 21st century education through accessibility to high-quality materials, instruction, learning and professional development?

To illustrate how research can build the volume of knowledge to support pedagogy for 21st century education, Professor Reimers shared a study conducted in Mexico that investigated the transfer of civic competencies from civic education to other curricula, and the effect of three pedagogical approaches, that is, lesson planning, participatory learning and a combination of lesson planning and participatory learning. The study found limited evidence of transfer and attitudinal change. However, there were changes in conceptions of gender equity, trust in the future, knowledge and skills, participation in school and the community, and evidence that support for teachers was powerful in influencing instruction.

## Conclusion

When thinking about how to improve schools, we should always ask ourselves whether we are teaching

the right thing. By thinking about and clarifying the goals of education, we will do better in dealing with the various challenges facing the world. Professor Reimers argued that to achieve world peace, everybody should be educated. We should not take peace for granted, because the values or the components that lead to peace change over time. These changes should make us reflect whether we should more intentionally cultivate in people the capacity to live happily alongside those who are different. To have a list of 21st century competencies is important for designing a powerful pedagogy, but we also need research to confirm or disconfirm our expectations of what may or may not work in practice.

## References

- Ministry of Education, Singapore. (2012). *Prepared remarks for Mr Heng Swee Keat, Minister for Education, on "Education for Competitiveness and Growth" at the Singapore Conference in Washington D.C., USA, on Wednesday, 8 February 2012*. Retrieved from <http://www.moe.gov.sg/media/speeches/2012/02/08/speech-by-mr-heng-swee-keat-at-the-singapore-conference-washington-dc-usa.php>
- P21. (2015). *Partnership for 21st century learning*. Retrieved from <http://www.p21.org/>
- UNESCO. (1996). *Learning: The treasure within: Report to UNESCO of the International Commission on Education for the Twenty-first Century*. Vendôme, France: Presses Universitaires de France. Retrieved from [http://www.unesco.org/education/pdf/15\\_62.pdf](http://www.unesco.org/education/pdf/15_62.pdf)
- World Values Survey Association. (2010–2014). *World Values Survey Wave 6 2010-2014 OFFICIAL AGGREGATE v.20150418*. Madrid, Spain: Asep/JDS. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>

# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE



## Introduction

**PROFESSOR FERNANDO REIMERS** began the lecture by proposing that public schools were created to empower ordinary citizens so that they could improve themselves and their communities, and in this way, achieve happiness. However, he questioned whether universal mass education, a remarkable outcome of the Global Education Movement, which started in earnest when the right to education was included in the Universal Declaration of Human Rights in 1947, was indeed empowering people to improve themselves and their communities. He suggested that we needed more attention to the question of the purposes of education, and ensure that the strategies we used to improve schools actually helped them become relevant in empowering individuals. He suggested that we also needed to be mindful of the limitations of any assessment system as a guide

to improvement, and to recognise that most system emphasised cognitive skills, often low-order skills and few domains, neglecting important human capacities such as character or social skills.

## Defining a Global Citizen

Bill Gates is well known for his efforts to tackle poverty and Professor Reimers used Gates as an example of an individual who is a part of the solution to global issues like poverty. He sees Gates as a global citizen, playing his part as an individual living in this world, transcending his identity as a citizen of the US.

Professor Reimers also brought up a music video produced by a then little known musician named Dave Carroll. He recounted the story of Mr Carroll travelling on a flight operated by United Airlines and the baggage handlers were not careful with Mr Carroll's guitar. Upon

# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

collecting his guitar after disembarking his flight, he found his fears realised as the guitar case opened to reveal a damaged guitar. Despite efforts via various channels, Mr Carroll was unable to obtain redress or compensation from the airline. His frustration prompted him to write and produce a song entitled “United Breaks Guitars” (Carroll, 2009). The music video was uploaded onto YouTube to be viewed online by anyone in the world. The music video caught the attention of the Chief Executive Officer of United Airlines and, as a result, a slew of policy changes were made in the training of United Airlines’ baggage handlers.

Both examples were of individuals who achieved a certain amount of success in effecting change on a larger platform. A key enabler in both cases was the power of technology. For example, the Internet enables people to connect, communicate and gather resources to address larger issues. Professor Reimers reckons that our education system should equip future generations with the ability to harness the enabling power of technology and to come together, collaborate and solve global issues. At the university level, more can be done to promote social entrepreneurship, innovation and global citizenship.

## Preparing Our People for Future Challenges

Professor Reimers outlined key strategies for achieving global competence:

- possessing knowledge and skills about the world and globalisation
- establishing internationally competitive curricula meeting world standards
- building a labour force with high levels of educational attainment

The lecture then focused on the knowledge and skills about the world and globalisation. Professor Reimers

elaborated that the knowledge and skills refer to the capacity to understand globalisation, anticipate risks, manage them, and seize and create opportunities in a highly integrated global economic context.

However, before the capacity can be developed, as Professor Reimers emphasised, awareness of global issues must be raised amongst our youth. As an example, he cited Hans Rosling’s 2013 social media tweet about what more can be done to raise awareness of the world poverty rate: “In US only 1 in 20 know that world poverty rate dropped... Pls upgrade US mindsets” (Rosling, 2013). Professor Reimers added that besides raising awareness of global issues, it is critical that we also have our people imbued with basic sound values, for example, doing unto others as one would have others do unto oneself. Public education can be the means to achieving peace between human beings. Other values Professor Reimers suggested were tolerance of others, and the importance of learning to value and embrace diversity as a source of strength rather than weakness.

Professor Reimers went on to mention a concurrent event happening in Incheon, the Republic of Korea, where the United Nations reaffirmed its commitment to education in a revitalised vision articulated in the Incheon Declaration (UNESCO, 2015). He expressed satisfaction at the value the United Nations has placed on global citizenship education in its vision for the year 2030.

## The Global Education Movement and Global Competency

Professor Reimers then brought up the topic of the global education movement. He was of the view that one of the most important works written on education was Article 26 of *The Universal Declaration of Human*



# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

*Rights* (United Nations, 1948), which declared that everyone has the right to education. This essentially meant that everyone should have access to schools and opportunities to acquire basic literacies. On this note, Professor Reimers posed a reflective question: “Instead of asking ourselves if we are doing better, we should be asking are we teaching the right things, and are our students learning the right things?”

He went on to emphasise that the goal of education is to empower and make our people relevant, equipped with 21st century skills and global competencies, which he briefly defined as:

- A positive disposition towards cultural difference. An interest in and understanding of different civilizational streams and the ability to see differences as opportunities for constructive transactions among people.
- An ability to speak, understand and think in languages in addition to the dominant language of the country in which people are born. Foreign language skills are analogous to stereoscopic vision to the global mind.
- Deep knowledge and understanding of world history, geography, of the global dimensions of topics such as health, climate and economics, and of the process of globalisation itself.

Referring to the World Values Survey conducted by the World Values Survey Association in 2010–2014 (World Values Survey Association, 2010–2014), Professor Reimers discussed the issue of trust between different people from groups identified by religion, nationality, race and language. He believed that if trust between people is high, there will be higher chances of collaboration between them. To achieve higher levels of collaboration, Professor Reimers opined that education systems should do more to address

the issue of tolerance and acceptance of diversities because, to quote him, “Even though living in a highly interdependent world is not an option, being educated to do so competently is.”

Quoting Professor Isaac Leon Kandelís work on internationalism (1928, p. 228, as cited in Reimers, 2015), he proposed that international understanding is

that attitude which recognises the possibilities of service of our own nation and of other nations in a common cause, the cause of humanity, the readiness to realise that other nations along with our own have by virtue of their common humanity the ability to contribute something of worth to the progress of civilisation.

In relation to his definition of international understanding, Professor Reimers expounded on global competencies (see Reimers, 2015):

- The first set of competencies is “soft” skills and attitudes that reflect an openness, interest and positive disposition to the variation of human cultural expression reflected internationally. In their most basic form, these skills comprise tolerance towards cultural differences. More advanced are the skills of recognising and negotiating differences in cross-cultural contexts, the cultural flexibility and adaptability necessary to develop empathy and trust, and enact effective inter-personal interactions in diverse cultural contexts.
- The second set of global competencies results from disciplinary knowledge in comparative fields: comparative history, anthropology, political science, economics and trade, literature, and world history. These are the competencies that allow knowledge and understanding of problems that have an international or global dimension.



# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

- The third set of global competencies is foreign language skills. These allow communication through varied forms of expression of language, with individuals and groups who communicate principally in languages other than English.

In addition to knowledge, cognitive, inter-personal and intra-personal skills are important and necessary for achieving global competency. He described each of these skills as encompassing the sub-components listed below:

- Cognitive skills
  - Processing and cognitive strategies: critical thinking; problem-solving; analysis; logical reasoning; interpretation; decision-making; executive functioning
  - Knowledge: literacy and communication skills; active listening skills; knowledge of disciplines; ability to use evidence and assess biases in information; digital literacy
  - Creativity: innovation
- Inter-personal skills
  - Collaborative group skills: communication; collaboration; team work; cooperation; coordination; empathy; trust; service orientation; conflict resolution; negotiation
  - Leadership: responsibility; assertive communication; self-presentation; social influence
- Intra-personal skills
  - Intellectual openness: flexibility; adaptability; artistic and cultural appreciation; personal and social responsibility; intercultural competency; capacity for lifelong learning; intellectual interest and curiosity
  - Work ethics/responsibility: initiative; self-direction; responsibility; perseverance;

productivity; persistence; self-regulation; meta-cognitive skills; anticipating the future; reflective skills; ethics; integrity; citizenship; work orientation

- Self-efficacy: self-regulation (self-monitoring and self-assessment); physical and mental health

## Challenges of Global Education

With the lecture having discussed what it means to be and what can be done to produce global citizens, Professor Reimers concluded by talking about the challenges of global education that he thinks we will face moving forward:

- Design: How do we design global education (objectives, content and assessment)?
- Implementation: What are the implementation and stakeholder-engagement strategies?
- Scalability: How can the programmes be scaled up to ensure maximum quality, accessibility and opportunity?

Professor Reimers proposed the following model (Figure 1) to approach these challenges and explained that:

- Strong leadership is crucial to begin with to embark on global education.
- Bold and clear vision needs to be formed and clearly communicated to all stakeholders.
- The vision will then drive curriculum design to eventually fulfil the vision.
- The next step following curriculum design is to build capacity in our faculties to deliver the curriculum.
- No single organisation can achieve global education alone and it is therefore essential to improve networks with others to synergise efforts toward common goals.

# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

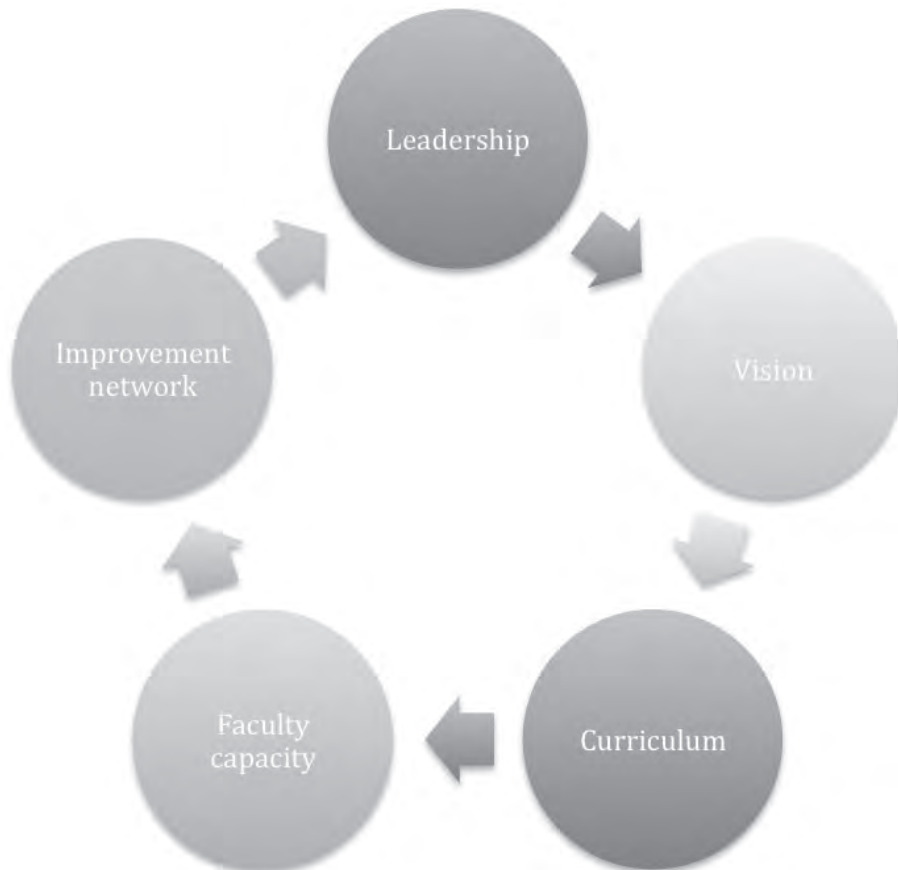


Figure 1. A proposed model to approach global education challenges.

- Finally, this model forms a feedback loop to the leadership to further refine all efforts toward global education goals.

The lecture concluded with the assertion that the ultimate goal of global education is to have more people see themselves as global citizens who participate in active roles competently.

## Question-and-Answer Session

Professor David Wei Loong Hung served as moderator in the question-and-answer session that followed the public lecture.

**Audience member 1:** The World Values Survey conducted by the World Values Survey Association in 2010–2014 (World Values Survey Association, 2010–2014) showed that increasing nationalism may negate the desire to embrace global citizenship. How do you think this can be mitigated?

**Professor Reimers:** According to the survey, currently tolerance for the person who is different has decreased by about 20 per cent as contrasted to increasing globalisation, suggesting something paradoxical is happening. As every person's identity is

# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

complex, part of educating people about globalisation is about teaching and developing an understanding that identities are multi-faceted, having different shades, including gender, political views and education. These can cause people to open up to the possibility that while we may differ in some of these identities, we may have common grounds such as similar goals and professional identities. So a person can be deeply nationalistic and also deeply cosmopolitan simultaneously. When we have that kind of deep knowledge of who you are and where you come from, I think you are much better equipped to embrace people who are different.

**Audience member 2:** How does teaching about global education fit in the culture of competition?

**Professor Reimers:** Global education is how you equip people to seize the opportunities of globalisation either for personal, national or international gain. I feel that globalisation should be about engaging collectively in solving challenges that affect everybody, for example, climate change. Qualities that make a business person or social entrepreneur are very similar. Creating a company is basically putting together a good team, organising a series of tasks and selling that idea, like Mr Bill Gates who is using the same set of skills to do something very different, for example, marshalling global collaboration to improve health conditions in Africa. So I see no contradiction when I think of global education in terms of allowing people to create and advance opportunities and, at the same time, enabling people to collaborate in solving shared challenges.

**Audience member 3:** Will the skills and competencies used in building a business be counter-productive due to greed and profit-making?

**Professor Reimers:** If you want people to develop an effort and take responsibility for shared challenges, you have to cultivate that effort explicitly rather than hope that it will happen. Students often ask for my views on not-for-profit versus for-profit and I am agnostic about that as I see no right or wrong in doing it not-for-profit or for-profit. Ultimately, are you effective in achieving your mission? And what is the right business model to achieve that?

I have also learnt that besides having good intentions, people with skills, capacity and successful model structures are needed to make the difference. Successful models require simplicity, clear strategies and sequence, and scalability. I have a friend who took over a bankrupted homeless shelter and changed it into a successful and profitable company that sells services to hotels and gardens, and I see nothing wrong with that.

**Audience member 4:** Should educators be emphasising global citizenship at a personal level or at a governmental level?

**Professor Reimers:** Let me clarify that I see no trade-offs between being nationalistic and a global citizen concurrently as both are compatible with each other. Global challenges should be tackled by both governments and individuals as governments play an important role in sustaining and governing all these multi-lateral institutions. Citizens should be educated on these shared challenges and the global architecture's purpose so that they can support the government in engaging with these institutions. For example, Brazil's robust foreign policy encourages members of the Foreign Service to take time off

# EDUCATING GLOBAL CITIZENS

PROFESSOR FERNANDO REIMERS

21 MAY 2015, PUBLIC LECTURE, CIVIL SERVICE COLLEGE, SINGAPORE

to join multi-lateral institutions, which suggests one way in which a government can promote global citizenship.

**Audience member 5:** What advice would you give to educators who do not have any globalisation-related curriculums or projects?

**Professor Reimers:** I think global citizenship is really a process of improving rather than an event as you are always learning, refining and understanding your place in the world. Opportunities to experience some form of global engagement is probably necessary to help educators develop the global dispositions mentioned. Examples include scientists collaborating across different countries and treating one another as family or athletes discovering their common humanity through a shared passion during the Olympics. Therefore, providing and figuring how to sequence these experiences could form the foundation from which to take the next step because it is not possible to achieve global dispositions through a 2-week course or retreat. What we need to figure out is how to let people live lives or follow educational trajectories that progressively take them out of their comfort zone.

## References

- Carroll, D. (2009). *United breaks guitar*. [Video file] Retrieved from <http://youtube.com/watch?v=5YGc4zOqozo>.
- Gates, B. (nd.) *Gatesnotes: The blog of Bill Gates*. Retrieved from <http://www.gatesnotes.com>
- Rosling, H. (2013, December 11). *In US only 1 in 20 know that world poverty rate dropped as shown below. Pls upgrade USmindsets* [Tweet]. Retrieved from <https://twitter.com/HansRosling/status/410876417396596736>
- Reimers, F. (2015). *CJ Koh professorship public lecture: Educating global citizens* [Presentation slides].
- UNESCO. (2015). *Incheon Declaration – Education 2030: Towards inclusive and equitable quality education and lifelong learning for all*. Retrieved from <http://unesdoc.unesco.org/images/0023/002331/233137E.pdf>
- United Nations. (1948). *The universal declaration of human rights*. Retrieved from <http://www.un.org/en/documents/udhr/index.shtml#a26>
- World Values Survey Association. (2010–2014). *World Values Survey Wave 6 2010–2014 Official Aggregate v.20150418*. Madrid, Spain: Asep/JDS. Retrieved from <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>

# THINKING SLOWLY ABOUT SINGAPORE

REFLECTIONS BY PROFESSOR FERNANDO MIGUEL REIMERS

**THIS YEAR**, I was honoured to be appointed the CJ Koh Visiting Professor at Singapore's National Institute of Education (NIE). In my research on how different nations define the competencies that young people need to thrive in the 21st century, Singapore occupies a central place because of the comprehensive and balanced nature of the goals that guide the education system, anchored in values and ethics and focused on the development of competencies for life, work and citizenship. I had previously visited Singapore and the NIE, when the cross-national research collaborative I led, the Global Education Innovation Initiative (GEII), held one of our meetings in Singapore. The CJ Koh Professorship, however, provided me a unique and different opportunity for scholarly exchange and learning without the pressure of producing results that marks the regular meetings of my research group. This appointment was an opportunity to see Singapore with new eyes, and to think slow, rather than fast. It was not as if my good colleagues at the NIE had not planned an agenda for my visit, there were plans and plenty of meetings, conversations, colloquia, and lectures, but the pace was just right to observe, beneath the surface, and to think slow about what I was observing.

I travelled to Singapore in May 2015. On my arrival, on a weekend, I took a long walk from my hotel to the National Museum of Singapore, where I had the opportunity to visit an exhibit celebrating the life and legacy of former Prime Minister Lee Kuan Yew, who had recently passed away. Seeing the exhibit, and reflecting on the history of the young nation, was a very good way to start this visit. It helped me frame and understand how the same impetus that led Mr Lee Kuan Yew to invest in the design of beautiful gardens, so people could be proud of living in a beautiful city, had led him and others to invest in education, as a way to help shape the character of the Singaporean people. Nations are narratives, and national identity encompasses the stories we tell others and ourselves

about who we are. Reflecting on the history of a young nation renders the power and intentionality of building such narratives more visible and it makes the role of the builders of such narratives also more apparent. This visit to the museum made me reflect not just on Mr Lee Kuan Yew, but also on other members of the generation of 'elders' of the country, those who were adults when Singapore was founded and who led the institutions that were created to foster the country's development. I thought of Professor Lee Sing Kong, the former Director of NIE, a remarkable institution founded by Dr Ruth Wong Hie King to support the continuous improvement of the education system, or Professor Kishore Mahbubani, the Dean of the Lee Kuan Yew School of Public Policy and of others like them. It's easy to see these leaders, in retrospect, as visionaries, as people who had a clear blueprint of how things were going to turn up in the end from day one. Reflecting on the exhibit, celebrating the life of Mr Lee Kuan Yew, however, I concluded that it was probably more accurate to see these elders as courageous risk takers, they might have been inspired by a vision that success in building the nation was possible, but more importantly they inspired others by their example, and by the courage they demonstrated when, at different times, made difficult choices because they realised they had to invent a path, where none existed.

It was that reflection on elders and founders, of their role in building a narrative for the country and its institutions and their courage to build a path, that framed my visit to Singapore on this second trip. This allowed me to see the education system not just as the high performing system that it is today, but more importantly as the result of a long process of continuous improvement, of determined and perseverant commitment to educating all children well, of humility in learning from experience and from others, and a continuous exercise in risk taking and in building and continuously expanding a narrative of the role the

# THINKING SLOWLY ABOUT SINGAPORE

REFLECTIONS BY PROFESSOR FERNANDO MIGUEL REIMERS

360 schools in the nation, and the teachers, contribute to the broader narrative of what is Singapore today and where it is headed. The evolution of this narrative about Singapore's education system illustrates continuous expanding aspirations, from the early days of educating for survival, to improving the basic performance of the education system, to focusing on higher cognitive skills, to more recently focus on a multidimensional view of human talent, that places values at the core, and that emphasises knowledge, but also skill, citizenship, global and national, character and creativity. This was the narrative and the process that I tried to understand as I carried on with conversations with some of the elders, with colleagues and students, as I tried to look deep and think slow. How does a group of leaders, and those who follow them, build a narrative about education with the capacity to inspire a long-term process of continuous improvement, and of expanding aspirations? How did Singapore build a good education system, as it built beautiful gardens?

My current interpretation, until I learn more, is that factors extrinsic to the education system, as well as intrinsic factors contributed to the construction of an education system committed to continuous improvement and to on-going rising educational aspirations. Among the extrinsic factors are the responses to some of the challenges facing the nation in the early days, recent enough to still inspire many education leaders, the commitment to rule of law and administrative efficiency and the personal experiences of the elders, those who witnessed the birth of Singapore and played leadership roles developing its institutions. Factors intrinsic to the education sector include a growing appreciation of education as a profession based on expert knowledge, a growing awareness of the importance of talent development to face adaptive challenges and a progressive

understanding of the role of scientific knowledge in supporting educational improvement.

## **The Extrinsic Forces**

Some of the impetuses for the vision were undoubtedly set in motion in the early days of the Republic, when Singapore was ousted from Malaysia. The uncertainty about political and economic survival served as background to a narrative of the importance of merit and hard work, so clearly supportive of an education system that is valued by all in the society. The pain of the race riots of the mid 1960s probably shaped some of the education policies to foster racial inclusion and tolerance, and those memories are likely at the root of some of the current emphasis of the curriculum on the development of cross-cultural competence and global citizenship.

Some of the support for the process of continuous educational improvement may have benefited from an overarching commitment to government administrative efficiency, honest government and rule of law. Institutions flourish when people know there are clear rules of the game, rewards to talent and effort and accountability, and the National Institute of Education flourished under those rules, attracting high calibre professionals who develop long-term commitments to the institution and to the improvement of the profession.

The leaders I have met, strike me also for their humility. They remember where the nation came from, and remember what life was like in earlier times. These memories give them an ability to place themselves in the shoes of people from many walks of life, to not take their current privileges for granted, to genuinely care about expanding opportunities for all. They do not seem to have the malaise of the ego that afflicts some leaders of great accomplishment and influence



# THINKING SLOWLY ABOUT SINGAPORE

REFLECTIONS BY PROFESSOR FERNANDO MIGUEL REIMERS

in societies where stratification and privilege have been passed down over centuries, where leaders may confuse who they are with their privilege and position. In Singapore, the memories of the humble beginnings of the country, of the race riots, seem to make those who remember more down to earth, more grounded, less self-assured or arrogant. I do hope, for Singapore, that the grandchildren of these elders can keep this down to earthiness, this humility, that is so helpful to building a society where people genuinely care about the most disadvantaged and downtrodden.

## **The Intrinsic Factors**

One of the most striking features of Singapore's education system is how much it invests in the professional development of teachers, not only in initial education, but also in their on-going development throughout their careers. The clear existence of various professional pathways for teachers and the many opportunities to help each education professional reach their highest potential place Singapore in a class of its own. This is not the standard operating theory around the world of how schools improve. More popular are theories that poorly borrow from dated industrial management models that posit that what is measured is what is managed, and that the road to improvement is to measure some goals, and hold people accountable for the achievement of those results. Sometimes that theory is accompanied by opportunities for professional development, but not always.

Singapore's inordinate commitment to lifelong professional development for teachers suggests that a different theory is at play, one that is based in an understanding of the need for deep expertise in order for professionals to face the many challenges they will encounter in the complex work of preparing the next generation for the future. This deep expertise forms the

foundation of a profession, and it is the development and cultivation of this expert knowledge that is the mission of the National Institute of Education. As part of the continuous evolution of the goals Singaporeans place on their schools, there is a clear awareness that many of the challenges of the future are still unknown, which makes the task of preparing students to meet such challenges very much an adaptive leadership challenge, rather than a technical one. The leaders of the programmes of teacher and principal preparation at the National Institute of Education operate out of sophisticated theories and approaches to prepare people for adaptive leadership. The way in which future school principals are taught scenario building and complexity theory, to then map backwards an educational improvement trajectory for a school where they have no formal authority, is a uniquely refined way to prepare school leaders for influence without authority, and to lead for relevance, rather than just for technical improvement. The way in which teachers are evaluated annually with an eye to help identify areas of professional growth, and to provide opportunities for development so that each educator advances in a career towards points of maximum effectiveness and impact, is particularly telling of an underlying philosophy that all educators matter and of a growth mind-set in how their talent is cultivated.

A uniquely distinctive feature of Singapore's continuous improvement is the virtuous relationship that exists among schools, the Ministry of Education, and the National Institute of Education. The NIE is a fascinating organisation, housed in a research university and thus accountable to the standards of excellence of research institutions—it is also expected to deliver value to the 360 schools in their efforts to improve. The academics of the NIE have the dual accountability of demonstrating that they can generate scientific

# THINKING SLOWLY ABOUT SINGAPORE

REFLECTIONS BY PROFESSOR FERNANDO MIGUEL REIMERS

knowledge, but also that the knowledge they generate matters to practitioners in schools. This creates a healthy tension, one from which other schools of education around the world could learn, about the interdependent nature of research and professional preparation in building a high quality profession and education system and of building educational theories that matter. Some of the virtuous dynamics that are going on are probably facilitated by the very manageable scale of the nation—several of the faculty at the NIE boasted that they had taught many of the staff in each of the 360 schools in the nation!—and of the NIE, with a staff of about 1000, which facilitates communication and coherence. More importantly, these dynamics are facilitated by institutional cultures that have respect for the past, short as it is, that value those who came before and their efforts and that build on those. This is the notion of continuous improvement, so different from the efforts of episodic attempts to ‘re-invent’ the system, which characterise approaches to education reform in other latitudes, and where sharp discontinuities in education policy from one administration to another feed cynicism and reform fatigue among practitioners. Under the leadership of its current Director, Professor Tan Oon Seng, for instance, the NIE recently instituted a Professorship in the name of the Institute’s founder, Dr Ruth Wong Hie King, a powerful symbolic way to convey to all members of the community the importance of acknowledging the contributions of the founders, the giants on whose

shoulders they now stand. A graduate of the Harvard Graduate School of Education, Dr Ruth Wong Hie King, the daughter of poor Chinese immigrants to Singapore, is remembered for her character and compassion, and for her persistent focus on examining and re-examining the goals of education.

On the road to the airport, at the end of this visit, I was grateful for the opportunity to have enjoyed thinking more slowly, for this second chance to visit this fascinating place and for meeting old and new friends, all for the first time, for the fellowship and hospitality of NIE Director Professor Tan Oon Seng and his colleagues, and for the inspiration drawn from learning what a small nation can accomplish as those who now succeed the founders stand on their shoulders to build the next set of institutional innovations to lead this small nation and her children in continuing to invent the future!

*This article was originally published in The Huffington Post and permission has been granted to re-publish this article herewith.*

## Reference

Reimers, F. (2015). *Thinking Slowly About Education in Singapore*. Retrieved from [http://www.huffingtonpost.com/fernando-reimers/thinking-slowly-about-edu\\_b\\_7912080.html](http://www.huffingtonpost.com/fernando-reimers/thinking-slowly-about-edu_b_7912080.html)

# LEARNING FROM SINGAPORE

## REFLECTIONS FROM A VISIT WITH A DELEGATION OF EDUCATORS FROM MASSACHUSETTS BY PROFESSOR FERNANDO MIGUEL REIMERS

*Following the CJ Koh Professorship visit, Professor Reimers led a delegation of education leaders from Massachusetts to learn first-hand about Singapore's education policies and programmes. The following are the reflections he wrote after this visit.*

**In THIS note**, I will distinguish characteristics of Singapore's education system which I admire, from ideas about practices that educational institutions in Massachusetts might adopt. The two are different: The latter requires that we think not only about Singapore's practices which may be contributing to the effectiveness of their education system, but also think about the similarities and differences between the Singaporean and Massachusetts contexts, so that those practices might be transferred from one to the other, with potentially similar effects. There are certainly practices Singapore might learn from Massachusetts, but discussing those is not the focus of this note.

### **Admirable Education Features in Singapore**

Singapore's history is admirable in many ways that matter to the role education plays in that society: the history of a small nation, which in 5 decades, developed from an impoverished former colony lacking natural resources to a self-reliant nation highly dependent on knowledge-intensive industries and trade as a result of a commitment to the rule of law, competent government and investment in education and other social policies. Political and education leaders often allude to the idea that the country's future and survival depends on cultivating the talent of each person. This makes education, the process designed to support such cultivation, central to the key narrative of the country and its future.

In addition to these overarching aspects of Singapore's historical development in which the narrative of education is embedded, eight distinctive features of education contribute to the high performance of

their education system. By high performance, I mean the capacity to achieve the goals that the leaders of the education system set out to achieve. Those goals have shifted over time and have become more ambitious. There are four distinctive "periods": 1) the goal of enrolling all students in school and teaching the basics; 2) the goal of getting all students to complete a course of basic education; 3) the goal of fostering the development of higher-order cognitive skills; and more recently, 4) the goal of creating learning opportunities in schools to gain a broad range of cognitive and social competencies, and to develop character.

These distinctive periods reflect shifts in the visions of policymakers regarding the economic and social imperatives facing the nation. It is this efficacy of the Singapore education system to achieve its own goals, and the clarity with which these goals have been articulated and reframed, that make the system high performing. A popular alternative conception of "high performing" makes reference to the performance of students in various countries in comparative assessments of student knowledge and skills such as PISA. While the high levels of performance of Singaporean students in PISA would also make the country high performing by this definition, this is not an explicit goal of the education policymakers, and therefore, not a consideration in my analysis.

- 1. A positive education narrative.** Education is highly valued in Singapore, and so are educators and the institutions in which they work. There are multiple manifestations of this, from the slogans painted in buses which say "Teachers, nation builders", to the way educators talk about their work. It is clear that education is believed to matter.
- 2. Education is a clear political priority of the State.** Education is not apolitical in Singapore. On the contrary, it is highly and strategically political.

# LEARNING FROM SINGAPORE

## REFLECTIONS FROM A VISIT WITH A DELEGATION OF EDUCATORS FROM MASSACHUSETTS BY PROFESSOR FERNANDO MIGUEL REIMERS

This is reflected in the consistent and high level of priority education receives among government policies, including financing for education. While education is perceived as a political priority for the nation's future, and perhaps because of it, there are limits to partisanship in education. This may be the result of the limited nature of political competition in Singapore, resulting from the dominance of the majority political party throughout most of the nation's history. Education is clearly a State-led activity, and hence one of the avenues in which the State has to deliver to the citizens, to demonstrate its commitment to equal opportunity, fairness and the rule of law.

3. **There are clear educational purposes in Singapore, aligned with future scenarios for the country's future development.** These goals are often communicated and well-known among educators at all levels in the education system. Education is perceived to be an important contributor to the economic and social development of the nation, hence the intentionality of focusing on intended outcomes of education in the form of knowledge, values and skills, which align with development goals. When development goals change, so do education goals. Education leadership in Singapore includes the capacity to create conditions that allow educational institutions to achieve their goals (leading for effectiveness), and also the capacity to realign those goals (leading for relevance). It is no accident that principals of Future Schools in Singapore are taught how to build future scenarios, and asked to align various future scenarios for the nation, with concomitant scenarios for schools of the future, and then asked to map a trajectory of improvement that can bring schools in the present towards the desirable future scenarios.
4. **Education is viewed as a practice that depends on expert knowledge.** This view undergirds Singapore's efforts to link research and practice by funding education research and conducting them in the same institution (the National Institute of Education [NIE]). The research is also responsible for teacher and school leader professional development and gives practitioners an important role in the generation of educational research. Very often, NIE researchers have spent significant professional periods as practitioners in classrooms, school leadership or the Ministry of Education. Similarly, practitioners in schools and in the Ministry also often do stints at NIE. These result in a seamless continuum between research and practice and make the challenge of "research utilisation" less apparent in Singapore.
5. **Professional development is a very serious component in Singapore's education system.** Education in Singapore is a learning profession also in the sense that those who practise it are always learning. Learning is a central part of the way in which human resources, whether they are teachers, school administrators or other professionals in the system, are managed and developed.
6. **There is much alignment and coherence among various education initiatives and across the various institutions of education which appear to be tightly coupled.** One gets the impression that in Singapore, educational institutions are a veritable system of interlocking components, where the various elements of the system are in sync with each other.
7. **In Singapore, education is a team sport.** The narrative of quality education in Singapore leads to the discussion of how teams in schools, between schools and other allied institutions produce excellence.
8. **Singapore's educators are remarkably open to learning not only from each other, but from other countries as well.** Colleagues at NIE are conversant with research and current education policy and practice in many different countries

# LEARNING FROM SINGAPORE

## REFLECTIONS FROM A VISIT WITH A DELEGATION OF EDUCATORS FROM MASSACHUSETTS BY PROFESSOR FERNANDO MIGUEL REIMERS

of the world. They value the development of institutional relationships that fosters intellectual exchanges and collaborations. Education leaders also have an inquisitive mind-set and are always asking, “How can we improve?” and “How can we do better?” There is little complacency among education leaders, in spite of the obvious educational achievements of the nation.

### **What Practices Might We Adopt in Massachusetts, Inspired by Singapore’s Experience?**

Which of these admirable practices might we adopt in Massachusetts? While the size of our population is similar, our histories, politics and institutional settings differ. Public education first emerged in the United States in Massachusetts, almost 2 centuries ago. This means that comparatively, we are dealing with much older institutions, and educational cultures and practices. Unfortunate by-products of such storied pedigree might be a certain conservatism, which may lead us to be sceptical of the value of learning from others. The grassroots nature of our democratic politics shapes also a strong tradition of local control of our schools, which create real obstacles to system integration. The historical roots of our public schools in our democratic politics make also for much more politicised educational practice than seems to be the case in Singapore. Local control by the people is somewhat at odds with the idea that education should be steeped in expert knowledge. We want our teachers to be experts, but we do not want experts to decide what should be taught or may be even who should teach. Anyone with a vote in a town hall or in a school assembly feels entitled to their views about how schools should meet their objectives.

Approaches to educational improvement fall in three distinct categories: a) improve the performance of the existing system through the definition of standards and use of incentives; b) professionalise the practice of education; and c) promote innovation and school

redesign. While in practice, many reforms reflect a blend of these approaches and it is most likely that one of these approaches is dominant. In the United States, for example, standards-based reform has been the dominant approach to improvement for the last couple of decades, with some intermittent efforts to foster innovation and redesign, and relatively little attention to professionalising education practice. In contrast, the dominant theory in Singapore is clearly to professionalise educational practice and to build a robust profession of educators, which the country often termed “the education fraternity”.

In spite of these obvious differences in fundamental theories of change about educational improvement between Singapore and Massachusetts, there may be some practices we could re-examine in Massachusetts, inspired by Singapore’s experience. Of course, we might also at some point, tackle the adaptive challenge caused by the fact that standards-based reform might be inherently limited in its capacity to help schools become responsive to the quickly changing context of work, and therefore become more relevant.

The first are the merits of a positive education narrative. We could establish concerted efforts to convey that education is indeed valued and so are teachers.

We could also make education a more strategic priority in the future of the State, although it would be challenging to make it strategically political, and non-partisan.

There have been efforts in Massachusetts to align education goals with future scenarios for the country. Those are most evident in the development of the Massachusetts Curriculum Standards, in conversations about assessment of student knowledge and skills, including the recent discussions of PARC, and in the 2008 report of a task force on education for the 21st century. But our educational institutions—those



# LEARNING FROM SINGAPORE

## REFLECTIONS FROM A VISIT WITH A DELEGATION OF EDUCATORS FROM MASSACHUSETTS BY PROFESSOR FERNANDO MIGUEL REIMERS

involved in teacher and school leader preparation—might do a better job incorporating the discussion of the alignment between education goals, and economic and social purposes in the curriculum. There might be lessons we could learn from Singapore such as how she prepares its school leaders to develop a long-term vision and to lead for long-term sustained improvement in their schools.

With over 80 institutions involved in teacher preparation in Massachusetts, we have an abundance of riches in terms of professional development opportunities, particularly for initial teacher education. But such richness poses some challenges to coordination and coherence, and hinders the agility with which a nation such as Singapore can pivot teacher preparation to align it with the new curriculum. In particular, we might learn from the extensive collaboration between NIE and K–12 schools in Singapore in providing ongoing professional development to teachers.

Can we create consortia of teacher preparation institutions and districts that collaborate in shaping a true continuum of professional development, from initial preparation to advanced practice? Can we create a system of teacher education out of the current large group of largely independent institutions that achieves greater coherence and synergies in their various efforts?

There are several mechanisms designed to promote coordination, including those advanced by the Department of Elementary and Secondary Education, and the periodic meetings of deans of teacher preparation institutions. How might those be leveraged to support efforts of institutional improvement in teacher preparation? Would it be possible to do for teacher preparation what the Department of Higher Education

is doing to support transfer across institutions through the Math Transfer Pathways? Coordinating a series of convening of chairs in core disciplines, the Department has facilitated the development of a consensus on general education requirements, the exchange of course syllabi and instructional resources, and the development of expected learning outcomes in those subjects.

If we are to achieve more coherence among our various educational initiatives designed to foster educational improvement, we would probably have to invest more on the development of professional capacity among leaders and teachers in schools, as it is in the school that these initiatives converge, as well as create coordination mechanisms among the various efforts advanced by an array of State agencies and independent organisations. This is a real adaptive challenge that would require an enabling political environment where partisanship is contained, in order to create space for ambitious efforts at coordination, system integration and attention to long-term outcomes.

With regard to Singapore's seventh feature, could we develop a narrative of quality education that emphasises the team nature of the sport?

Lastly, always learning from others, our visit demonstrates that we can indeed hop on an airplane and visit another country to learn from her institutions and practices, and these reflections are intended to make explicit some of what we learned and to share it with others. We should be able to make the comparative study of education a normal practice in our education and research institutions, and to cultivate and value the development of cross-national collaborations as much as our Singaporean colleagues do.





***About the CJ Koh Professorial Lecture Series***

The *CJ Koh Professorial Lecture Series* was launched by the Office of Education Research in 2011. It was conceptualised for the purpose of knowledge building and sharing with our internal, external and international stakeholders in education, who can benefit from the information shared during each CJ Koh Professorship visit.

Each year, outstanding professors in the field of education are hosted by the National Institute of Education under the CJ Koh Professorship in Education programme. The CJ Koh Professorship has been made possible through a generous donation by the late Mr Ong Tiong Tat, executor of the late lawyer Mr Koh Choon Joo's (CJ Koh) estate, to the Nanyang Technological University Endowment Fund.

For enquiries, please contact Series Editor Associate Professor Ee Ling Low ([eeling.low@nie.edu.sg](mailto:eeling.low@nie.edu.sg)).





An Institute of



A publication of the Office of Education Research,  
NIE/NTU, Singapore © 2016

ISSN 2251-3019