An Institute of Distinction

news

JANUARY 2007 No. 59
ISSN 0218-4427

Innovation of the year 2001

An Institute of NIE Director Prof Lee Sing Kong elaborates on his aspirations for the institute (page 3)

NIE Director Prof. Lee Sing Kong elaborates on his aspirations for the institute (page 3)
Contents

CORPORATE DEVELOPMENTS
3 Lee Sing Kong Assumes NIE Directorship
20 New NIE Director at a Glance

COLLABORATIONS
6 NIE Offers Consultancy Services Overseas
NIE Collaborates on Computer-Assisted Assessment Project

PROGRAMMES
13 Equipping Teachers with Cultural Intelligence

CONFERENCES & SEMINARS
14 Inaugural International Science Education Conference Draws to Successful Close
15 Asia-Pacific Education Research Association International Conference

HAPPENINGS
18 Run-racing for Fund-raising
ACTIVE Day 2006
19 Calendar of Events

GRADUATION
13 Journey of Inquiry Pays Off for Potential Principals

AWARDS & HONOURS
7 When Researchers & Teachers “Get Attached”
8 University Lauds Teachers Extraordinaire
9 Psychologist Feted for Spirit of Volunteerism
10 First-Class Teachers Do More than Teach
11 Student Teacher Wins Second Prize in National Chinese Music Competition
12 Conservation Efforts Make NIE a “Friend of Water”

SERVICE
12 Wisdom from the Tree of Learning

VISITORS
15 A Renewal of Ties between UAE & NIE
16 Vietnamese Vice Minister Appraises Singapore’s Education System
Canadian University Officials on Benchmarking Trip
17 Education Minister of State Has Rendezvous with Staff & Students

NIE News is published quarterly by the Public and International Relations Department, National Institute of Education, Nanyang Technological University.
The next issue will be published in April 2007.

Please address your comments to:
The Editorial Team, NIE News
Fax: (65) 6896 8874
Email: nienews@nie.edu.sg
National Institute of Education
1 Nanyang Walk, Singapore 637616
Tel: (65) 6790 3888
www.nie.edu.sg
NTU Reg No: 200604393R
NIE News is also available at www.nie.edu.sg/nienews.

Designed & Printed by KHL Printing Co Pte Ltd
Lee Sing Kong Assumes NIE Directorship
In Tune with the New Chief

W idely regarded by students and staff as an outstanding leader, researcher and educationist, 55-year-old horticulturalist Lee Sing Kong assumed leadership of NIE from Prof Leo Tan on 1 November 2006. Prof Lee, who was previously Dean of the Graduate Programmes and Research Office, speaks to NIE News on his aspirations for NIE’s future.

NIE News: Your predecessor Prof Leo Tan charted NIE’s corporate direction for more than a decade. What special role will he now play?

I wish to acknowledge Prof Tan for his inspirational leadership of NIE for the last 12 years. He has been an inspiring mentor to me personally, and I believe, to many of my colleagues as well. Prof Tan will
CORPORATE DEVELOPMENTS

continue to serve as a professor in the Natural Sciences and Science Education Academic Group at NIE and represent the institute in establishing strategic links with other leading institutions around the world. He will also help in the training of international leaders in the field of education.

NIE, having grown in unimaginable ways over the years under Prof Tan’s visionary leadership, is now recognised as one of the leading educational institutes internationally, judging by the acceptance rate of our papers at key conferences, the number of renowned international visitors that visit NIE and the requests by top academic institutes to benchmark themselves against our standards and practices. All these stellar developments have come about because of the hard work that each of us has invested collectively under his inspirational leadership.

NIE News: How has your three-month tenure as the third NIE Director been?

I am indeed humbled by the responsibility that has been entrusted to me and will do my utmost to honour the trust. New responsibilities bring new challenges. The position of NIE Director embraces a myriad of duties, some of which I am still becoming acquainted with. Fortunately, I am supported by very experienced and competent colleagues, who enjoy my full confidence. Aside from the day-to-day duties of the Director, I have been rather preoccupied with developing future plans. We need to contemplate the fulfillment of our diverse roles effectively in the light of dynamic changes taking place both locally and abroad so that NIE can continue to grow in stature locally and internationally.

NIE News: What are your priorities for NIE?

I intend to capitalise on the strong foundation laid by Prof Tan. NIE has in place an excellent teacher education model that prepares good teachers to meet the needs of our school system. This model is appreciated by our peers internationally. However, for NIE to continue being recognised as a leading educational institute, we have to progress taking into consideration global developments. We must dare to refine existing practices and be willing to develop alternative models that can meet different needs arising from the changes in the national and global landscape.

NIE News: How do you intend to operationalise your masterplan for the institute?

I shared with the NIE community my goals for the institute on 17 and 20 November 2006. The three critical pillars, which I believe will propel NIE ahead in the medium to long term, require us to meet the needs of our stakeholders: achieve international recognition through educational research and impact the international educational fraternity through our diverse range of formal and executive programmes. To achieve the goals of the three pillars, we must do the following:

First, develop teacher education programmes that are responsive and relevant, keeping abreast of the changing times and catering to the needs of our stakeholders. Our programmes should harness the enabling powers of new technologies and scientific developments, hence equipping and preparing teachers for the digital age. Through such opportunities and exposure, teachers can help unlock the potential of every pupil in the schools.

Second, conduct relevant educational research focusing on issues that will yield findings to re define classroom practices and shape educational policies, enabling pupils to realise their learning potential. When our research findings can impact schools and pupil learning, it will attract international attention. Publishing our findings in top tiered journals would help to build up this pillar.

Third, expand NIE’s influence in educational development internationally by way of consultancies, formal and executive programmes.

Through the effective development of our teacher education programmes and the impact of our educational research, we hope to maintain our competitive edge as a leading educational institute and be an institute of choice for educational programmes internationally.

In consultation with our staff, the NIE Council and international advisory panels, we have begun to draw up preliminary strategic plans for the building of these pillars, which in turn will support our vision of being an institute of distinction and uphold our mission of excelling in teacher education and educational research.

NIE News: What factors do you envisage are crucial for NIE to succeed in its endeavours?

Three key success factors, which are imperative in our journey towards excellence, are responsiveness, relevance and quality. Let me use the digital age for illustrative purposes. Taking cognizance of the new and ever changing educational landscape in this digital age, the Learning Sciences Laboratory and the Centre for Research in Pedagogy and Practice can respond by embracing new developments in interactive digital media and develop new pedagogies. To stay relevant to the needs of our clients, we need to prepare and educate teachers to be digital-savvy.

To accomplish this, our professorial staff need to be role models in the use of such technologies and our curriculum should incorporate such skills and knowledge into the pedagogy. With regard to quality and excellence, we must strive for the highest quality in all aspects of our programmes and services. We can demonstrate quality and excellence in the delivery and academic standards of our offerings, in the high quality of our graduates, in the way we do business and in our dealings with national and international educators. These tangibles must be able to withstand intense scrutiny and evaluation by advisory and quality-control panels.
But above all, to bring any plan to fruition and for an organisation to achieve greater heights, its people must work as a team, sharing a common purpose and understanding of our vision. NIE can achieve success only when everyone is clear of his goals and is focused on achieving them. In this respect, every person has an important contribution to make. Every staff member must be a leader in his own right to represent NIE in our perpetual search for distinction. At the same time, we are a family that cares for each other. We must also constantly remind ourselves of the fundamental purpose of NIE, which is to prepare teachers who can then help realise the potential of every school-going child. We must not lose sight of this objective in whatever programmes or activities we organise.

**NIE News: You have retained your deanship of the External Programmes Office. What plans do you aspire to achieve through this avenue?**

In this appointment, I hope to continually expand NIE’s role in increasing the provision of quality education programmes for our international clientele. In recent years despite stiff competition with several renowned institutions, NIE has made in-roads into Middle Eastern countries through the educational consultancies that we undertake in Abu Dhabi, Qatar and Indonesia. The World Bank and Asia Development Bank are also tapping on NIE’s expertise to facilitate the advancement of education in several developing countries. Our Leaders in Education International programme has graduated several cohorts of senior educators from our neighbouring countries, Australia, China, Germany and India, who look towards Singapore’s innovative brand of educational leadership as a plausible alternative to their best practices. There is a wealth of opportunities to export teacher education, Singapore style. Through these international involvements, NIE hopes to spread her influence and impact education positively in the region and also establish a good network of international alumni. Harvard University has been able to gain international standing through both academic excellence and the establishment of an extensive international alumni network through both formal and informal programmes.

**NIE News: Work aside, how do you occupy yourself when away from the cares of office?**

We are all probably familiar with the consequences of all work and no play. I have several therapeutic interests. Reading, listening to church music and watching the occasional films – English, Chinese, Malay, Hindi and Tamil films are equally in my repertoire as long as they capture my interest – are some activities that recharge me for the working week ahead. Taking brisk walks around Singapore’s reservoirs with my wife on Saturday mornings is an activity I always look forward to. Of course I do have a weakness for food especially the more “sinful” ones – they are always delightful to the taste buds!
NIE Collaborates on Computer-Assisted Assessment Project

By Assoc Prof Anthony Seow, English Language & Literature & Asst Prof Chew Lee Chin, Psychological Studies

The signing of a memorandum of understanding (MOU) on 4 October 2006 between NIE and an industry partner, CommonTown Pte Ltd, signaled the launch of the third and final phase of an NIE initiated Computer-Assisted Assessment (CAA) project. The then NIE Director Prof Leo Tan (above, left) signed the MOU on behalf of NIE and Mr Joel Loo (above, right), Chief Executive Officer of CommonTown, acted on his company’s behalf.

The project, which began in March 2005 and spearheaded by Asst Prof Chew Lee Chin (Psychological Studies) and Assoc Prof Anthony Seow (English Language and Literature), will officially end in March 2007. It involves 10 participating primary schools with 60 teachers and 2,400 students.

The signing of the MOU was, all in all, a momentous, optimistic and unifying event. It is a momentous occasion for the project because it marks the introduction of a web-based application of CAA (from an initial client-based platform) with multimedia capabilities for assessment of student performance. It is optimistic in that the project aims not just to bring the application software to a higher level of innovative use by the member schools but also to capture subsequently the interest of other schools in Singapore and, hopefully, elsewhere. Finally, the project is unifying as it brings together the participating schools to work harmoniously in clusters for the purpose of collaborative online assessment, creative use of technology, and sharing of assessment resources.

The project is a modest beginning of what promises to be an exciting period of change from the traditional paper-and-pencil mode of testing to a more widespread use of CAA in Singapore schools at the primary level. The infrastructure for exploiting technology for computerised testing is already firmly in place. This CAA project, with a homegrown product, may just be that catalyst for change.

In addition, the agreement covers aspects of curriculum development, administrative processes, staff and student matters, and development of the new ENCED complex. Mr Mubarak said, “The Council is very fortunate to have such a well-recognised teacher training institution as its partner in the development. NIE is Singapore’s premier teacher education institution which has played a critical role in ensuring educational excellence in Singapore schools.” Prof Tan responded by saying, “We are delighted to partner with ADEC in this important developmental phase. Preparing students for the challenges in this rapidly changing technological era places huge demands on our students. Our teachers must be suitably equipped to provide students with the necessary skills and knowledge to adapt to their environment.”
When Researchers & Teachers “Get Attached”

Research Centre Recognised for Contribution to Professional Development of Teachers

By Ms Yasmin Ortiga, Centre for Research in Pedagogy & Practice

In November 2006, the Centre for Research in Pedagogy and Practice (CRPP) received the distinction of being a “Partner of Teachers Network” at the annual Teachers Network (TN) Awards ceremony, held at the Alumni Clubhouse of NTU. This was the first time that organisations were recognised for their contributions to the professional development of teachers in Singapore. Receiving the award was Asst Prof Kim Koh, the principal investigator of a project under CRPP’s Core Programme that investigates the quality of teacher assessment tasks and student work in local classrooms. Other researchers in the team included Ms Lee Ai Noi, Ms Wong Hwei Ming, Mr Gong Wengao, Ms Winnie Tan Szu Ling and Ms Snow Tan Ee Ping. Ms Diane Rozells was the project manager. Through TN’s Teacher Work Attachment (TWA) programme, a total of 72 teachers took part in the project from 2004 to 2005. They attended teacher moderation sessions where they received training on evaluating the quality of assessment tasks and students’ work using standards and rubrics (Manuals for Scoring Teacher Assessment Task and Student Work) developed by Asst Prof Koh and her team. They then applied these skills to score actual samples of assessment tasks and student work collected from 59 schools in subjects such as English, Social Studies, Science, Mathematics and Mother Tongue languages.

While the TWA aims to provide a learning experience for teachers, Asst Prof Koh believes that “being attached” to teachers was enriching for the project team as well. “Working closely with teachers is very important for us researchers,” she says. “We may have the grand theory and excellent research design or methodology but you also need the teachers’ practical experience.” In particular, Ai Noi felt she benefited from the collaboration. “The teachers I worked with were either heads of departments or senior teachers in their schools so when they interacted, you really gain a lot of perspectives on pedagogy and assessment practices,” she says. “At the same time, they gave a lot of feedback on whether the indicators really enhanced students’ intellectual quality.”

The TWA was also a new way for the research team to interact with the teachers. While observing and interviewing teachers have always been part of research work, the work attachment allowed teachers to take part in the analysis of data and give input for the research findings. “Teachers were actively involved so a kind of partnership was formed. It’s like there’s a cycle of communication,” says Winnie.

Of course, the most valuable outcome of the TWA experience was the opportunity to develop and promote research among teachers or as stated by Asst Prof Koh, “the key agents of alternative assessments”. “I think TWA allows teachers to think about their own assessment practices and the kind of assessment tasks that encourage students to engage in higher order thinking and real-world problem solving,” she says.

According to Hwei Ming, who is a former teacher herself, the TWA provided “good practice” for the teachers. “They may be using certain standards but without going through a moderation process, one teacher’s ‘A’ could be different from another teacher’s ‘A’,” she says. “Although this process was tedious and they had to argue about certain scores, they reached a consensus and learnt a lot from it as well.” Asst Prof Koh added, “This moderation process ensures the objectivity, reliability and validity of scores derived from rubrics-based assessment.”

Currently, these assessment standards are endorsed by the Ministry of Education in the PETALS (A Toolkit for Engaged Learning and Teaching) guidelines. A number of teachers have also modified the standards and rubrics and used them to determine the effectiveness of assessment tasks in their own schools. Plans are being made to publish the standards and rubrics for all subjects for use by more teachers.
AWARDS & HONOURS

A University Lauds Teachers Extraordinaire

By Mr Wong Wing Chow, Human Resource

Research interests of Assoc Prof Ruth Wong: Reading & writing in primary school, children's literature – pedagogical perspective & bilingualism

Research interests of Asst Prof Jean Yong: Plant physiology, eco-physiology, environmental & conversation biology

Research interests of Asst Prof Isabella Wong: Conversational biology, psychological studies, pedagogical perspective & bilingualism

NIE News: What are the attributes of a good teacher?

Ruth: I guess the best ones to ask this question to would be our student teachers! At the end of the day, I think that what really counts is our heart – our student teachers and our students can tell who cares for them and who teaches from the heart ie are passionate about teaching.

Isabella: The four words of “persons”, “passion”, “purpose” and “pedagogy” say it all for me. Good teachers hold a deep belief in the value and respect of “persons”. They seek every opportunity to build on the strengths of their students and empower them, by facilitating their best learning. Good teaching, I believe, is grounded in a constantly developing “pedagogy”, which is reflective and reflexive – always dynamic, always learner-focused. Helping to focus that practice and propel it forward is “purpose” – purposeful and engaging learning experiences which have meaning for the learner who gets to construct and control their learning. I wish to share a quote by William James which has shaped my strivings in teaching: “In teaching, you must simply work your pupil into such a state of interest in what you are going to teach him that every other object of attention is banished from his mind; then reveal it to him so impressively that he will remember the occasion to his dying day; and finally fill him with devouring curiosity to know what the next steps in connection with the subject are.” And the creative energy for the whole process would come from the “passion” the good teacher has for nurturing people. Finally, there must be professionalism and integrity in good practice.

NIE News: Who inspired you to be a teacher?

Ruth: I had some very inspiring teachers when I was in school.

Jean: Good teachers can change a person’s life for good! I am a product of my teachers, colleagues and life experiences. My own teaching style evolves through my own personal experiences and encounters. I am most fortunate to have many good teachers in my formative years, notably Professors Hew Choy Sin, Paul Clifford, Ian Turner, P N Avadara, Alex Ip, Graham Fanqihar, Stuart Letham, Wong Suan Chin and D H Murphy and supportive NIE colleagues viz Assoc Prof Tham Yoong Ne, Asst Prof Shawn Lum, Assoc Prof Tan Swee Ngin and Assoc Prof Ng Swee fong, who had nurtured and guided me in my teaching of Science.

Isabella: During an important transitional stage in my life, someone dear to me shared the feeling of great thankfulness for the honour of having...
with me on how she felt I had been given some special abilities that I should take careful stewardship of. She had thought of my passion and ability to influence people towards positive change and had recommended that I gave teaching a try.

NIE News: How important is the role of the teacher in moulding the future generation?

Ruth: No matter how embarrassed or uncomfortable we are about the fact that we are or we should be role models, we ought to know that we play a major role in influencing the character development of those under our charge. This, to me, is more important than imparting knowledge.

Jean: Teachers are indeed pivotal in moulding the next generation.

Ruth: Thank you for wanting to be a teacher. We are dedicated to helping you feel successful and be committed to this great calling.

Jean: Be passionate, be enthusiastic and most importantly, be wise. Always be open and willing to learn, un-learn and re-learn. It is not easy to learn how to be wise. If you have the time, I would advise you to watch Da Chang Jin, a Korean television drama based on the story of a historical figure. Da Chang Jin is more than just a “cooking show” as it teaches you about human moral values and how to be wise under so many difficult situations in real life!

Isabella: A good teacher must be prepared to give. You have to give of yourself generously and almost endlessly. You have to give of your time and your energies, and some say, your heart and soul. Just about all good teachers I have known are eternally busy. The reward for their busyness is even more busyness. I have observed that good teachers seem to draw the most students, get the most requests for help, work most diligently grading assignments, preparing lessons and improving teaching, work hardest at knowing their students, take time to give students counsel in and out of class and are most involved in professional activities. They seem to think that being a responsible teacher, the work of good teaching expands to fill every moment they give to it. Teaching seems to be all about helping students and good teachers have not found many workable shortcuts to doing so, but to give exceedingly. Nobody likes to think of teaching as in loco parentis, but the good teachers I know seem to find that best teaching feels a lot like parenting. By this I mean that good teachers seem to find that the caring that goes into teaching feels a lot like the caring that goes into parenting. It means knowing when to stand firm on standards and expectations; and when to bend or even apologise. It means knowing the difference between soft caring and tough caring. It means a desire to know your students’ insecurities, problems and capacities and seeking to help them be the best they can be. It means treating and loving your students like your own children.

Psychologist Feted for Spirit of Volunteerism

By Public & International Relations

A t the same faculty and Staff Dinner, the university bestowed upon Assoc Prof Vilma D’Rozario (Sub Dean, Student Development and Liaison, Foundation Programmes Office) the Nanyang Award for Service. Her citation reads as: “Vilma has worked far beyond the call of duty and her numerous contributions to community development stretch beyond geographical boundaries. She has been actively involved in the NIE Service Learning Club since 2003 and has made immense efforts to empower student leaders to take on Youth Expedition Projects overseas to work with communities in need of development and assistance. Team Project Polwatta (a nominee team for the Nanyang Award) was one of many exemplary projects initiated by Vilma. The team went to tsunami-affected south Sri Lanka to help rebuild the Polwatta School and to help educate the students there. The impact of the team’s project rippled through schools in Singapore and created a positive influence on students. On top of these, Vilma helps run the Psychology Clinic with her colleagues at NIE and is active as a volunteer outside NIE, serving three centres under the Students Care Service Board. She is also an environmental educator serving actively with the Nature Society (Singapore). Her contributions reflect her deep-rooted community spirit and selflessness, and her quest for excellence, together with her entrepreneurial spirit as a fund raiser, truly exemplifies the Nanyang Spirit.”

Assoc Prof D’Rozario shares, “I receive the Nanyang Award for Service in honour and as recognition of the freedom and opportunity to pursue my love for service learning and volunteerism within and beyond NIE. I thank my fabulous colleagues and friends for their unstringent patience, support, encouragement and belief in me. My appreciation also goes to the students teachers of NIE, who consistently inspire and motivate me with their energy, enthusiasm and compassion for others. They help me find meaning and enjoyment in my work and my service. This award is for them!”

Research interests of Assoc Prof Isabella Wong: Learning and social and emotional development of pre-school and school-age children and adolescent psychological and psycho-educational assessment and interventions, child & adolescent psychotherapy.
First-Class Teachers Do More than Teach

Caring Teacher Awards 2006

By Assoc Prof Nick Aplin, Chairman, NIE Alumni & Endowment Committee

The biennial presentation ceremony of the sixth Caring Teacher Awards took place on 3 October 2006 at the Orchard Hotel. The event was jointly organised by NIE and ExxonMobil Asia Pacific Pte. Ltd., with support from the Ministry of Education. The awards, first given out in 1996, are aimed at acknowledging and rewarding school teachers, who through their daily deeds and actions, demonstrate exemplary character, initiative, integrity, altruism and a proven record of service to their schools and students.

The guest of honour was Mr Gan Kim Yong, Minister of State for Education and Manpower. Also present were the then NIE Director Prof Leo Tan and Mr Derk J Hartgerink, Manufacturing Director, Singapore Chemical Plant, ExxonMobil Chemical Operations Pte. Ltd. Mr Gan epitomised the qualities of exemplary teachers in his speech, “First-class teachers have to be passionate about teaching and about their students… They do not look upon teaching as a job, but as a mission and their mission is to help students develop their hidden talents. With their guidance, they bolster every student’s confidence and courage to explore and discover new possibilities. First-class teachers do not merely teach their students, they care about their students.”

The three main award winners viz Ms Tan Lay Leng of Tanjong Katong Primary School, Ms Venkatraman Chithra of Riverside Secondary School and Mr Eric Hui of Serangoon Junior College were honoured with trophies and prize monies, together with 13 other teachers who received commendation awards.

Ms Tan Lay Leng
One of her pupils wrote about her that she had intervened on his behalf and that he was thankful for support that had ultimately prevented him from experiencing police action. The boy had stolen a camera and a handphone and had gone to sell the items. Ms Tan retrieved the goods, at her own expense, and prevented serious trouble for the boy.
Ms Venkatraman Chithra
As Head of Discipline, she had been involved with counselling children and she had seen the desperate plight of many youngsters. She was involved in counselling children with suicidal tendencies, helping them to restore some form of equilibrium to their lives. On one nomination form, a student called her the “greatest influence in my life” and penned a poem entitled “Angel in my Life”. One line from the poem said it all about Ms Venkatraman, “Her words will wipe away your greatest fears.”

Mr Eric Hui
Mr Hui had been recognised by many junior college students as demonstrating sincerity in wanting to reach out and help them during their time of need. He possessed a listening ear and was always on call to provide academic help. He would stay back after school to provide advice on many issues. He was characterised by one nominator as a helpful motivator with a million-dollar smile.

Ms Yick Jue Ru, a first-year Bachelor of Arts (Education) student teacher majoring in Music, won second prize in the Yangqin Open Category of the National Chinese Music Competition 2006. The competition, which was held from 5 to 16 December 2006, comprised the ensemble and solo categories. Competition in the solo category was divided into junior, youth and open categories. The event attracted 263 participants.

“My competition pieces for the preliminary round were 凤凰于飞 (Conjugal Felicity) and 海燕 (Sea Swallow). The most challenging round happened in the finals when we had to perform a set concerto piece. Being my first attempt, I was slightly anxious with its delivery. The piece, entitled 凤凰飞 (Phoenix), was composed in 2003 by Xu Chang Jun and was inspired by the various drumming patterns and elements found in Chinese operas. Being atonal in nature, the work further distinguishes itself from the typical classical Chinese pieces with its dissonances and various irregular rhythms.

“Although I had participated in national and international music competitions playing either the piano or yangqin, I personally felt that this competition represented one of my most meaningful and enriching experiences. With more musical knowledge gained especially in recent years, I was able to apply what I had learnt to the pieces, which enabled me to appreciate the inner workings of the piece and perform it with individuality,” says Jue Ru.
Wisdom from the Tree of Learning

By Assoc Prof Nick Aplin, Physical Education & Sports Science

The task may prove difficult without the hint that all of them have a Singapore connection. Well, they are all entries in the recently published *Singapore: The Encyclopedia*, which was launched in early September 2006 by Singapore President S R Nathan at the Istana. Published by Editions Didier Millet, this mammoth work with 2,500 entries is the most extensive compilation of facts and features yet to be created in Singapore.

There is another link. Each of these topics and more than 100 other entries were penned by academic staff of NIE. The professional body was commissioned to assist by writing short articles on their areas of expertise for inclusion in the encyclopedia or to act as consultants on the content material within the tome. Special acknowledgement was ascribed to Prof Leo Tan (Natural Sciences and Science Education) and Assoc Prof Kelly Tang (Visual and Performing Arts), who were also featured amongst the actual list of entries.

Academic staff who contributed to the encyclopedia included Assoc Prof Hadjah Rahmat (Malay settlements and literature), Asst Prof Eugene Dairianathan (music of Mandarin popular culture and Indian classical music), Prof Ooi Giok Ling (urban development and settlements), Mr Edmund Lim (the Jewish community in Singapore), Assoc Prof Kevin Blackburn (the Japanese occupation of Singapore), Asst Prof Shawn Lum (nature reserves), Prof Leo Tan (Labrador Nature Reserve), Assoc Prof Nick Aplin (sport in Singapore), Mr Nicholas Tang, Prof S Gopinathan, Ms Helen Doreen Tan, Assoc Prof Koh Hock Kiat, Mr Azhar bin Ibrahim and Asst Prof Mohd Mukhlis bin Abu Bakar.

What do Labrador Nature Reserve, Mamoru Shinozaki, Housing Development Board, Victor Sassoon, Central Catchment Nature Reserve, Malay Settlements, Indian classical music and Grace Young have in common?

Conservation Efforts Make NIE a “Friend of Water”

By Public & International Relations

Published by Editions Didier Millet, this mammoth work with 2,500 entries is the most extensive compilation of facts and features yet to be created in Singapore.

There is another link. Each of these topics and more than 100 other entries were penned by academic staff of NIE. The professional body was commissioned to assist by writing short articles on their areas of expertise for inclusion in the encyclopedia or to act as consultants on the content material within the tome. Special acknowledgement was ascribed to Prof Leo Tan (Natural Sciences and Science Education) and Assoc Prof Kelly Tang (Visual and Performing Arts), who were also featured amongst the actual list of entries.

There is another link. Each of these topics and more than 100 other entries were penned by academic staff of NIE. The professional body was commissioned to assist by writing short articles on their areas of expertise for inclusion in the encyclopedia or to act as consultants on the content material within the tome. Special acknowledgement was ascribed to Prof Leo Tan (Natural Sciences and Science Education) and Assoc Prof Kelly Tang (Visual and Performing Arts), who were also featured amongst the actual list of entries.

Academic staff who contributed to the encyclopedia included Assoc Prof Hadjah Rahmat (Malay settlements and literature), Asst Prof Eugene Dairianathan (music of Mandarin popular culture and Indian classical music), Prof Ooi Giok Ling (urban development and settlements), Mr Edmund Lim (the Jewish community in Singapore), Assoc Prof Kevin Blackburn (the Japanese occupation of Singapore), Asst Prof Shawn Lum (nature reserves), Prof Leo Tan (Labrador Nature Reserve), Assoc Prof Nick Aplin (sport in Singapore), Mr Nicholas Tang, Prof S Gopinathan, Ms Helen Doreen Tan, Assoc Prof Koh Hock Kiat, Mr Azhar bin Ibrahim and Asst Prof Mohd Mukhlis bin Abu Bakar.

What do Labrador Nature Reserve, Mamoru Shinozaki, Housing Development Board, Victor Sassoon, Central Catchment Nature Reserve, Malay Settlements, Indian classical music and Grace Young have in common?

In recognition of NIE’s contribution towards making its premises water efficient, the Public Utilities Board recently welcomed NIE as a “Friend of Water” under its Water Efficient Buildings programme. A “Friend of Water” is an organisation or individual who has done his part in raising awareness of Singapore’s water sustainability. The programme aims to develop and interest many allies and guardians of Singapore’s waters. The institute joins a community of like-minded companies which share a similar passion about doing their part for this limited resource.

The Development and Estate Department is instrumental in implementing initiatives to embibe water consciousness among staff and implementing practical measures on water conservation in NIE. Since the introduction of several plans in maximising water use efficiency on campus, the institute’s water consumption has been reduced by 10%. Some of the measures implemented include continuous monitoring of water usage through periodic audit, collecting rainwater for watering the hockey pitch, controlling water consumption in the chiller plant’s cooling towers, adopting low flow concept campus-wide and other water saving appliances. In fact, the department has a holistic approach to resource conservation by exploring various ways to reduce both water and energy usage and cost.
Journey of Inquiry Pays Off for Potential Principals

Equipping Teachers with Cultural Intelligence

Att 27 weeks of intellectual discourse, 38 senior educators received their Leaders in Education Programme (LEP) certificates at a graduation dinner on 17 October 2006 in the presence of guest of honour Education Minister Tharman Shanmugaratnam, their families and friends.

Conducted by NIE, the LEP is a full-time executive programme for talented educators selected by the Ministry of Education for principalship. The programme focuses on innovation and the creation of new knowledge. Participants’ thinking is provoked through a series of challenging experiences, which include an industrial attachment, exploring innovation in a school setting, seminars with international experts and an overseas learning exposure. Through these interactions, participants are better slated to lead their schools to new heights and approach schooling in new and innovative ways.

For achieving the best performance in the innovation project, Mr. Charles Leonard Surin was presented the Dr. Ruth Wong Medal while Ms. Melanie Ann Martens received the Academy of Principals Prize for Leadership Learning for attaining the highest level of learning across the programme. For best overall performance, Mr. Lee Yan Kheng was awarded the Lee Kuan Yew LEP Award.

The occasion, held at the Meritus Mandarin Hotel, was also attended by Ministers of State for Education Gan Kim Yong and Rear-Admiral (NS) Lui Tuck Yew, Permanent Secretary for Education Lieutenant-General (NS) Lim Chuan Poh and senior dignitaries.

Living in a multicultural society, Singaporeans are certainly not bogged with food and are perfectly comfortable with a plethora of choices in local cuisines, fashion and language, which they then adopt and give a local twist to. But a superficial awareness of each other’s culture is not sufficient. Not only are prospective Mother Tongue teachers expected to be virtuoso in their own culture and language, they also need to develop their students’ competencies in becoming knowledgeable about their heritage as well as that of others. As Mother Tongue teachers have a critical role in enhancing cross-cultural sensitivities and eliminating related misconceptions, they should be equipped with cultural intelligence so as to guide their future changes in forging better ties with ethnically diverse peers.

The first step the Special Training Programme took in addressing these concerns was through a series of monthly seminars. These three three-hour seminars provided a platform for student teachers to gain an in-depth understanding of and clarify preconceived notions on various aspects of their own and other cultures.

The seminar series started in August 2006 with Mr. Mohd Ali Hanifiah of Innova Junior College speaking on Development of Malay Language and Culture in Singapore. His presentation, peppered with examples of the dynamic nature of the language, left his audience particularly intrigued by the influence of other languages and cultures in shaping the Malay identity. The second session on Chinese Language and its Significance in the 21st Century was held in September 2006 and delivered by Dr. Ang Beng Choo, a retired educator and curriculum developer. She spoke about the four tones of the language, which phonetically distinguished Chinese characters, and the associated difficulties for non-native novices of the language. She described several hilarious conversations between native and non-native speakers who were not able to differentiate between the flat, rising, low rising and down tones. Apart from tonal variation, her talk led to a discussion on the need for learners to understand the culture of the speakers of any given language and the implications of learning a language without understanding the culture. The seminar series concluded with a hands-on talk by Mr. S Jegathesan of Jurong Junior College on Yoga in the 21st Century. His presentation had student teachers and lecturers trying out a series of “classroom yoga”. Mr. Jegathesan’s willingness to candidly address several fallacies about the origin and practice of yoga was appreciated by both student teachers and lecturers.

While the idea of organising a seminar is not unique in nature, it provided student teachers with an opportunity to interact with experts and their peers on cultural issues that are seldom discussed. It also served as an impetus to motivate student teachers to educate themselves on cultural issues.
Besides Rear-Admiral (NS) Lui Tuck Yew, Minister of State for Education being guest of honour for this landmark event, attendees were also privileged to have five distinguished overseas speakers giving plenary talks that covered science education for the 21st century, learning in informal settings, multiple representations and other cutting-edge developments in this fast-moving field. For many, including those in Singapore, the event marked the first time many participants had seen and interacted with these eminent personalities in the flesh.

This conference was truly international in flavour by virtue of its 400 registered participants from some 18 countries presenting over 160 papers. NSSE and some generous faculty members also sponsored seven graduate students from Malaysia, Pakistan, the Philippines, Taiwan and Thailand, to present their work at the conference. As with all conferences, the networking and sharing opportunities that occurred over the three days were one of the most valuable outcomes. One doctoral student from NIE experienced a minor breakthrough in her research after discussions with one of the speakers while another found an educator doing very similar work in Thailand. Moreover, the overseas delegates were able to gain firsthand knowledge of the many exciting programmes offered by NSSE through visiting the academic group’s open house on the last day of the conference.

Based on feedback from the participants, ISEC was a resounding success and both researchers and teachers definitely took home something that they could use in their professional lives. As one local science teacher told the organisers, ISEC was something that was very long overdue. Indeed, Singapore has much going in terms of science education for she is building on her solid foundation in science and technology as well as benefiting from quality schooling as a whole. With the next conference planned for 2009, the organisers will certainly face a tough challenge to repeat what happened in November 2006.
A Renewal of Ties Between UAE & NIE

By Public & International Relations

Assoc Prof Quek Jin Jong (Principal Officer) hosted a five-member delegation, led by Dr Hanif Hassan Ali, Education Minister of the United Arab Emirates, during their visit to NIE on 8 November 2006. Assoc Prof Sylvia Chong (Associate Dean, Programme Planning and Development, Foundation Programmes) and Assoc Prof Goh Chor Boon (Associate Dean, External Programmes) highlighted the institute’s suite of academic programmes alongside Prof S Gopinathan’s (Vice Dean (Policy), Centre for Research in Pedagogy and Practice) briefing on research initiatives spearheaded by the Centre for Research in Pedagogy and Practice. Prof Gopinathan also took the opportunity to update the minister on NIE’s consultancy with the Abu Dhabi Education Council and the development of the Emirates College for Advanced Education. After a tour of the Learning Sciences Laboratory and Classroom of the Future, Dr Hanif concluded his visit by meeting students from Abu Dhabi, who are currently pursuing their undergraduate studies at NIE (left).

Asia-Pacific Educational Research Association International Conference

By Asst Prof Jessie Ee, Psychological Studies

The Asia-Pacific Educational Research Association (APERA) International Conference was held from 28 to 30 November 2006 in the campus of Hong Kong Institute of Education, with Educational Research, Policy and Practice in an Era of Globalisation: The Asia-Pacific Perspectives and Beyond as its theme. Attended by about 800 educators, researchers and policy-makers hailing from 39 countries, Singapore was well represented by both NIE academics and teachers from the Ministry of Education. Assoc Prof Tan Oon Seng (Head, Psychological Studies) spoke on Problem-based Learning Pedagogies: Psychological Processes and Enhancement of Intelligences, which was one of six keynote addresses. He was also elected President-designate of APERA for 2008.

Ms Intan Azura Bte Mokhtar from Nanyang Technological University won the APERA-Education Research, Policy and Practice Young Researcher’s Award, which was presented during the conference banquet. The next conference will be hosted by Singapore in 2008.

NIE NEWS
Vietnamese Vice Minister Appraises Singapore’s Education System

By Public & International Relations

The then NIE Director Prof Leo Tan, Prof Lee Sing Kong (Dean, Graduate Programmes and Research), Prof Goh Kim Chuan (Associate Dean, Student Development and Liaison, Foundation Programmes) and Ms Eva Moo (Manager, Classroom of the Future) hosted the ministerial delegation to presentations on the institute’s academic programmes and a guided tour of the Classroom of the Future.

Dr Nhung expressed his appreciation of the fruitful exchange of information concerning Singapore’s education system and its development strategy. The vice minister also paid courtesy visits to Teachers Network, Institute of Technical Education, Singapore Polytechnic, a junior college and schools.

Canadian University Officials on Benchmarking Trip

By Public & International Relations

The dean of University of Toronto’s Ontario Institute for Studies in Education (OISE) and her colleagues paid a one-day visit to NIE on 6 December 2006. Prof Jane Gaskell was accompanied by Dr Glen Jones, Associate Dean, Academic and Mr Joe Weinberg, Chief Administrative Officer.

OISE, created in 1996 by merging with the university’s Faculty of Education, is one of the largest and most research-intensive faculties of education in North America and the top place in Canada to study education.

NIE Director Prof Lee Sing Kong, together with Assoc Prof Angela Wong (Associate Dean, Practicum and School Matters, Foundation Programmes), Prof Paul Teng (Dean, Graduate Programmes and Research), Prof S Gopinathan (Vice Dean, Policy, Centre for Research in Pedagogy and Practice) and Prof Leo Tan (Natural Sciences and Science Education), presented the various teacher preparation programmes and research agenda of NIE. The delegation also met Assoc Prof Lim-Teo Suat Khoh (Dean, Academic), Mr Sim Cheng Tee (Divisional Director, Corporate Planning and Development) and Assoc Prof Philip Wong (Divisional Director, Academic Computing and Information Services) for afternoon discussions on benchmarking indicators.
Education Minister of State Has Rendezvous with Staff & Students

As part of a series of introductory visits to educational institutions, Education Minister of State and Member of Parliament for Tanjong Pagar Group Representation Constituency Rear-Admiral (NS) Lui Tuck Yew (above, left) called on NIE on 23 October 2006, the eve of Hari Raya Puasa. After a welcome address by the then NIE Director Prof Leo Tan, Assoc Prof Cheah Horn Mun (Dean, Foundation Programmes) and Prof Lee Sing Kong (Dean, Graduate Programmes and Research) briefed the minister on the institute’s initial teacher preparation and professional development programmes.

The minister was then brought on a tour of the Classroom of the Future (left) and Student Hub, where Trainee Teachers’ Club President Muhammad Sheefudin Bin Jamal hosted the ministerial delegation at the campus’ newest facility. Admiral Lui then met a group of student teachers for a discussion on a range of topics pertaining to their aspirations and career development (above).
Run-racing for Fund-raising
By Public & International Relations

Fund-raising took an unusual approach, as the inaugural NIE Director’s Relay raised more than S$45,000 for the Singapore Heart Foundation.

Conducted over a 12-hour period from 13 October 2006, this dawn-to-dusk event was organised in appreciation for outgoing NIE Director Prof Leo Tan. Some 500 runners took part in this relay-style race as they attempted to complete as many laps as they could, and at the same time, do their part for charity.

Teams of six or 10 members were formed, with each member running, jogging or walking a distance of 2.4 km around the NIE campus, before passing a light-stick baton to the next team member. This was repeated through the night, until Ran the next morning. The runners comprised staff, students and alumni of NIE, NTU, as well as friends from other institutions of higher learning and members of the running fraternity. Topping the competitive category was team MR 25, who covered a distance of 185 km or 77 laps. For their efforts, they received a cash prize of S$600. Another group of 19 individual runners covered a total of 864 km or 360 laps. The longest distance covered by an individual runner was 86.4 km or 36 laps.

The funds raised came from registration fees, pledge cards and donations from sponsors and well-wishers. The teams also sought their own sponsors, where a certain amount per kilometre or a fixed sum would be pledged by each sponsor. This gave the teams extra motivation to clock as many kilometres as possible.

Prof Tan, who selected the Singapore Heart Foundation as beneficiary, was full of admiration for the efforts put into organising this event. He said, “In my 15 years and nine months in NIE and NTU, I have never ceased to be amazed by the magnitude of the dedication of my colleagues at work and at play.” Assoc Prof Goh Chor Boon, Chairman of the NIE Director’s Relay Organising Committee, added, “We all need endurance to complete our marathon of life. This event demonstrates the endurance and perseverance of our NIE colleagues and friends. We came, we ran and we had great fun!”

ACTIVE Day 2006
By Ms Rebecca Joseph, Senior Officer, Healthy Lifestyle

In conjunction with the National Healthy Lifestyle Campaign, ACTIVE Day (All Companies Together In Various Exercises) was held on 15 September 2006 in Nanyang Technological University’s (NTU) Sports and Recreation Centre. In his welcome address, Assoc Prof Michael Chia (Chairman, Healthy Lifestyle Committee and Head, Physical Education and Sports Science, NIE) thanked the more than 400 participants for their fervent support and led staff in an exuberant cheer of “Fabulous NTU! Fabulous NIE! Fabulous Healthy Lifestyle”. Guest of honour Mr Anthony Teo (Secretary to the University) urged staff to view their health seriously and take personal responsibility in leading a robust lifestyle.

The activities lined up for the morning included the Annual President’s Challenge Run, Mass Walk cum Jog and Mass Aerobics in Bollywood Style. The Annual President’s Challenge Run was a 4.2 km route along the southern part of the NTU campus whereas the Mass Walk cum Jog covered 2.7 km around the Sports Centre Quadrant. After flagging off both events, Mr Teo completed the Mass Walk cum Jog alongside other exercise enthusiasts of the NTU community. Almost half of the participants pranced to the beat of Bollywood dance, which many testified as “fun, exciting and rewarding”.

A new record was made when Mr Ong Say Cheng (School of Electrical and Electronic Engineering, NTU) won first place in the Men’s Individual Category of the Annual President’s Challenge Run. He completed the run in 16 min 50 sec, beating the previous record of 17 min 15 sec. In the Women’s Individual Category, Mrs Jacklyn Ko (Head, Human Resource, NIE) achieved her circuit in 18 min 26 sec, shaving almost a minute off the previous record. Her compatriots from NIE won the Annual President’s Challenge Trophy. The event ended with the distribution of attractive goodie bags to all participants.
## Calendar of Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Venue</th>
<th>Contact Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Investiture Ceremony</td>
<td>17 Jan 2007</td>
<td>Nanyang Auditorium, NTU</td>
<td>Mrs Mak Lek Cher&lt;br&gt;Email: <a href="mailto:lekcher.mak@nie.edu.sg">lekcher.mak@nie.edu.sg</a></td>
</tr>
<tr>
<td>NIE IT Fiesta</td>
<td>2 Feb 2007</td>
<td>NIE Campus</td>
<td>Ms Nenny Noorman&lt;br&gt;Email: <a href="mailto:nenny.noorman@nie.edu.sg">nenny.noorman@nie.edu.sg</a></td>
</tr>
<tr>
<td>NIE e-Learning Week</td>
<td>5 - 9 Feb 2007</td>
<td>–</td>
<td>Ms Nenny Noorman&lt;br&gt;Email: <a href="mailto:nenny.noorman@nie.edu.sg">nenny.noorman@nie.edu.sg</a></td>
</tr>
<tr>
<td>Diploma in School Counselling Graduation Ceremony</td>
<td>9 Feb 2007</td>
<td>Lecture Theatre 1, NIE</td>
<td>Ms Serena Yuen&lt;br&gt;Email: <a href="mailto:serena.yuen@nie.edu.sg">serena.yuen@nie.edu.sg</a></td>
</tr>
<tr>
<td>Graduation Ceremony for Specialist Diploma in the Teaching of English, Mathematics &amp; Science</td>
<td>9 Feb 2007</td>
<td>NIE Campus</td>
<td>Ms Cherie Lek&lt;br&gt;Email: <a href="mailto:yianping.lek@nie.edu.sg">yianping.lek@nie.edu.sg</a></td>
</tr>
<tr>
<td>International Conference on Character Development through Service &amp; Experiential Learning</td>
<td>12 - 13 Mar 2007</td>
<td>NIE Campus</td>
<td>Mrs Jessica Tan&lt;br&gt;Email: <a href="mailto:jessica.wong@nie.edu.sg">jessica.wong@nie.edu.sg</a></td>
</tr>
<tr>
<td>LEGO Engineering Conference 2007</td>
<td>13 - 14 Mar 2007</td>
<td>NIE/NTU Campus</td>
<td>Mr Jacques See&lt;br&gt;Email: <a href="mailto:jacques.see@nie.edu.sg">jacques.see@nie.edu.sg</a></td>
</tr>
<tr>
<td>Educational Research Association of Singapore Symposium 2007 – Research and Reflections: for Better Student Learning</td>
<td>16 Mar 2007</td>
<td>Singapore Polytechnic</td>
<td>Ms Joey Lim&lt;br&gt;Email: <a href="mailto:lili.lim@nie.edu.sg">lili.lim@nie.edu.sg</a></td>
</tr>
<tr>
<td>Leaders in Education Programme Orientation</td>
<td>16 Mar 2007</td>
<td>Tutorial Room (5-01-TR43A), NIE</td>
<td>Ms Mae Chan&lt;br&gt;Email: <a href="mailto:meipoh.chan@nie.edu.sg">meipoh.chan@nie.edu.sg</a></td>
</tr>
<tr>
<td>Welcome Ceremony for NIE-Huazhong University of Science &amp; Technology Master in Educational Administration</td>
<td>Mar 2007</td>
<td>China</td>
<td>Ms Cherie Lek&lt;br&gt;Email: <a href="mailto:yianping.lek@nie.edu.sg">yianping.lek@nie.edu.sg</a></td>
</tr>
<tr>
<td>NIE WITs Convention 2007</td>
<td>4 Apr 2007</td>
<td>NIE Campus</td>
<td>Ms Joyce Leong&lt;br&gt;Email: <a href="mailto:Joyce.leong@nie.edu.sg">Joyce.leong@nie.edu.sg</a></td>
</tr>
<tr>
<td>Redesigning Pedagogy: Culture, Knowledge &amp; Understanding</td>
<td>28 - 30 May 2007</td>
<td>NIE/NTU Campus</td>
<td>Ms Shirley Sret&lt;br&gt;Email: <a href="mailto:07edconf@nie.edu.sg">07edconf@nie.edu.sg</a></td>
</tr>
<tr>
<td>Mathematics Teachers’ Conference</td>
<td>1 Jun 2007</td>
<td>NIE Campus</td>
<td>Assoc Prof Berinderjeet Kaur&lt;br&gt;Email: <a href="mailto:berinderjeet.kaur@nie.edu.sg">berinderjeet.kaur@nie.edu.sg</a></td>
</tr>
<tr>
<td>Teachers’ Investiture Ceremony</td>
<td>10 - 12 Jul 2007</td>
<td>Nanyang Auditorium, NTU</td>
<td>Mrs Mak Lek Cher&lt;br&gt;Email: <a href="mailto:lekcher.mak@nie.edu.sg">lekcher.mak@nie.edu.sg</a></td>
</tr>
<tr>
<td>National Day Celebrations</td>
<td>Aug 2007</td>
<td>NIE Campus</td>
<td>Mrs Jessica Tan&lt;br&gt;Email: <a href="mailto:jessica.wong@nie.edu.sg">jessica.wong@nie.edu.sg</a></td>
</tr>
<tr>
<td>Leaders in Education (International)</td>
<td>Sep 2007</td>
<td>NIE Campus</td>
<td>Ms Cherie Lek&lt;br&gt;Email: <a href="mailto:yianping.lek@nie.edu.sg">yianping.lek@nie.edu.sg</a></td>
</tr>
<tr>
<td>Official Opening of Emirates National Centre for Education</td>
<td>Sep 2007</td>
<td>Abu Dhabi, UAE</td>
<td>Ms Cherie Lek&lt;br&gt;Email: <a href="mailto:yianping.lek@nie.edu.sg">yianping.lek@nie.edu.sg</a></td>
</tr>
<tr>
<td>Official Opening of Sampoerna Teachers Institute</td>
<td>Oct 2007</td>
<td>Jakarta, Indonesia</td>
<td>Ms Cherie Lek&lt;br&gt;Email: <a href="mailto:yianping.lek@nie.edu.sg">yianping.lek@nie.edu.sg</a></td>
</tr>
</tbody>
</table>
New NIE Director at a Glance

By Public & International Relations

Prof Lee Sing Kong assumed the directorship of NIE on 1 November 2006, serving as its chief executive and academic officer. Concurrently as Dean, External Programmes Office, he is also responsible for expanding NIE’s role in the increasing provision of educational programmes for an international clientele.

He served as Dean, Graduate Programmes and Research Office from 2000 to 2006. Under his deanship, the office has been successful in expanding the enrolment of in-service teachers in professional development programmes and revamping training programmes for school leaders.

Prof Lee embarked on his career in April 1975 in the then Parks and Recreation Department and left as its Deputy Commissioner for Ngee Ann Polytechnic in May 1989. In July 1991, he took up the post of Senior Lecturer in the Biology Division, School of Science, NIE and later headed the division.

Education
Prof Lee received his PhD from the National University of Singapore in 1985. He pursued his Bachelor of Horticultural Science degree at the University of Canterbury, New Zealand in 1974 on a Colombo Plan Scholarship awarded by the Public Service Commission of Singapore.

Research Interests
A horticulturist by training, Prof Lee’s interests are in agrotechnology, urban forestry and plant tissue culture. He has been involved in the greening of Singapore since 1975. In 1991, he joined NIE and embarked on research in aeroponics (above). He developed and adapted aeroponic technology for the production of temperate vegetables in the tropics through rootzone modification. He has received national and international recognition for this work. The technology has since been commercialised with the setting up of two commercial farms, one in Singapore and one in Malaysia.

Professional Contributions
Prof Lee has been very much involved in developing inquiry-based approaches for the teaching of the biological sciences. His completed projects of regenerating terrestrial vegetation and mangroves on reclaimed plots serve well as teaching resources by encouraging students to understand different aspects of environmental and biological sciences.

Awards
Prof Lee is recipient of numerous awards, notably the Public Administration Medal (Bronze) (1981), Save Planet Earth Merit Award (1992), Chevalier dans l’Ordre des Palmes Académiques (1999), National Technology Award 2000, Excellence for Singapore Award 2001, Singapore Innovation Award 2001, Public Administration Medal (Silver) (2004) and Fellow of the Singapore Institute of Biology (2005). The aeroponic technology which he pioneered also won the Asian Innovation Award (Bronze) in 1998 and the Urban Agriculture Award (under the auspices of the United Nations) in 2000.