NTU OPEN DAY

This year, the NTU Open Day was held on 15 August 1992 at the Bukit Timah campus to enable the newly established NIE to promote its degree courses, teacher education programmes and research programmes and developments. The occasion was a symbolic one as it brought together, for the first time, the efforts of staff and students of both campuses.

The theme was “Nurturing Tomorrow’s Professionals: The University with a Difference”. This theme brings into focus the objective of the University which aims to develop the “Total Professional” competent in his profession and responsible to society.

Dr Cham Tao Soon, President of NTU, was the Guest-of-Honour. He was welcomed with a lion dance performed by students of the Jurong Campus. The President viewed key exhibits in the various Schools and interacted with staff, students and visitors. He also watched a microteaching session, demonstrations on innovative teaching, a gymnastic display and toured the Exhibition Room at the Centre for Applied Research in Education (CARE).

Visitors received first hand information about courses of study, research programmes and the University from staff and students manning the computers and display panels set up by the Jurong Campus Schools at the Block B concourse.

The School of Arts provided a variety of exhibits, performances and hands-on workshops such as art workshops on Chinese painting techniques, western painting, ceramics and three-dimensional art; a music workshop on “Learning music through computers” and a reading workshop on children’s literature. New technologies in education were given emphasis in several demonstrations, for example, the use of a home grown computer software “NIE Singapore Keyboard and Tamil Typing Tutor”. Geographic Information Systems for spatial data analysis and the ways in which the keyboard laboratory enhances classroom music teaching. Creative approaches to teaching were demonstrated by the Malay Unit through a puppet show, the History Division in their mime and the Chinese Language Unit performances using poetry and prose.

The School of Science provided a sampling of the range of science and science education research and teaching activities that go on within the School. The key exhibits continue on page 12
MATHEMATICS TRAILING

On the morning of Saturday 15 August 1992, small groups of teenagers could be seen around the Bukit Timah Campus seemingly concentrating intently on the walls of buildings, the steps, drain covers, manhole cover and even the numbers painted on car parking lots. No, they were not part-time building inspectors hired by the Development and Estate Division - they were Open Day visitors doing mathematics trailing.

A Maths Trail is a mathematical adventure where the explorer moves around a particular area, in this case the NIE campus, answering mathematics questions about his surroundings. The purpose of maths trailing is to arouse an awareness in the participants that mathematics is all around them. Professor Leo Tan, the Dean of School of Science, said “I see the Maths Trail as a good opportunity for people who see Maths as a dull and dry subject to experience how Maths can correlate with real life.” Furthermore, to debunk the myth that mathematics is all about formulae and precise answers and that one is only doing Maths when one does “Sums” with paper and pen, Maths trails usually emphasise skills such as estimation and mental calculation.

In the Mathematics Trail especially designed for the Open Day, participants signed up at the Tower Block and, being issued a booklet containing the questions and instructions proceeded down to the Students’ Recreation Centre and up again through B Block, across the quadrangle, down to the Library and to the carpark in front of Oei Tieng Ham Building before ending the trail back at the Tower Block. Those who successfully completed the trail were awarded badges proclaiming “I conquered the NIE Maths Trail”.

The mathematical tasks they had to perform included estimating the height of the Tower Block, working out the slopes of steps, estimating π using a round manhole cover, estimating distances along the sides of quadrangle and the distance saved by cutting across diagonally and seeing patterns in car numbers.

It was encouraging to see students enthusiastically working out the problems in spite of the hot weather and it was especially heartening that the very first group of adventurers were a group of 5 students from the Singapore School for the Deaf.

At the end of the Open Day, more than 70 participants had “conquered” the trail and to the staff of the Division of Mathematics who planned and organised this event and to the FGDE(Sec) Mathematics trainee teachers who tested out the trail before the Open Day, the event was worth all the effort because it had allowed the participants to experience the relevance and the enjoyment of a subject dear to their hearts – MATHEMATICS!
METALEARNING: Can Children Improve the Way They Manage Their Studies?

By
Dr Agnes Chang Shook Cheong, Dr Seng Seok Hoon
and Metalearning Project Team Members from the School of Science, School of Arts and School of Education

Eugene Chew found that his students in the pre-university classes were intelligent but did not perform well in examinations. From a survey on study skills, he found that his students had problems with concentration, memorisation, time-management, reading comprehension, note-taking and examination techniques. He was most concerned that they were also low in motivation. This scenario is real and true of many other classrooms at all levels in Singapore.

Can these students be helped to improve in their study skills and hence their grades? The future looks promising as recent research shows that differences in the outcomes in learning can be attributed in part to the learning strategies adopted by the students.

But what actually constitutes effective learning?

LEARNING TO LEARN

Learners need to know how to learn, how to use what they have learned and how to communicate what they have learned. They must be able to define the problem, get the facts, analyse the facts, weigh alternative solutions and determine how to evaluate the chosen solution, thus providing feedback for the future decisions.

Beswick (1981)

To many parents, learning means memorisation of notes and text and lots of homework. The effectiveness of a school is often evaluated by the amount of homework given! But learning, according to Beswick means more than just committing to memory large amounts of factual information. It involves information skills, self-questioning, memory skills, comprehension skills, analytical skills, monitoring skills and careful decision-making. All these skills are important in making a student an effective and independent learner. One very important aim in education in a changing world is for students to acquire skills which are transferable to other situations in life, outside the classroom.

METALEARNING

When a student is aware of himself as an active agent in the process of learning, Metalearning is said to have taken place. According to Professor John Biggs, he will be able to select the learning strategies to suit his motives and purposes. He will no longer be concerned with just what to learn or think in order to achieve his educational goals. Once metalearning skills are part of his knowledge repertoire, he would be able to adopt or adapt and apply them to any problem-solving situation beyond his school years.

What happens to students who have not acquired metalearning skills?

Relative to their successful peers, underachievers have been found to be less able to:
* estimate their ability to complete a task
* plan and organise strategies to solve a problem
* select and apply appropriate strategies
* monitor their programmes in completing a task
* identify and correct their mistakes
* evaluate their overall performance on completing a task.

A local survey carried out by Dr Agnes Chang and her associates on 1393 students in 9 secondary schools, 2 junior colleges and 2 Pre-University centres indicate that the lack of, or poor choice, of strategies to be one of the problems underlying the lacklustre performance of our students. The data on SECONDARY NORMAL and EXPRESS students showed the following differences in the way they view and manage learning:-

NORMAL STUDENTS
* were motivated by usefulness, rather than interest, in learning a subject.
* preferred subjects where they have to learn only facts and do not have to read much to understand the materials.
* used strategies not very appropriate for English, which is not a content subject, such as:
  (a) doing summaries;
  (b) writing down main points;
  (c) reading ahead of the class.
  approached the learning of Mathematics by:
  (a) trying to memorise everything when the lesson was too difficult to understand;
  (b) believing that there is only one way to solve a problem;
  (c) memorising model answers.

EXPRESS STUDENTS
* showed greater enjoyment in learning a subject.
* preferred subjects which challenge them to read widely and reflect on what they read.
* used strategies such as:
  (a) rephrasing notes and questions;
  (b) using the language at every opportunity;
  (c) finding out what others think of their spoken expressions;
  (d) writing letters or diaries to improve their English.
used strategies such as:
(a) trying to solve problems in past examination papers;
(b) believing in practice and drill in learning mathematics;
(c) trying to think of different ways to solve problems;
(d) drawing diagrams to help in solving problems.

Does Maturity Improve Students’ Choice of Learning Strategies

In the same study, YOUNGER (i.e., Secondary Two and Secondary Four) students were compared with OLDER (i.e., Junior College Two and Pre-University Three) students. Some differences in their learning strategies are as shown below:

**YOUNGER STUDENTS**
- were more concerned with achieving immediate goals of passing examinations and getting a well-paid job.
- relied more on rote memorisation, preferring fact learning and reading and also admitted to heavy dependence to teachers notes.
- were less aware of the critical importance of time-management in tests or examinations.

**OLDER STUDENTS**
- expressed greater interest in their thinking.
- were more confident and favoured strategies which are more relevant and effective for different subjects.
- were more aware of the importance of time-management.

Some Studies on Metalearning in Singapore

Dr Seng Seok Hoon carried out a number of studies on Mediated Learning Experiences (Prof Reuven Feuerstein and others). She began with a study of 7 low achievers who were receiving free tuition in a community centre for 2 months; then to a bigger group of about 30 extended and normal primary pupils for one and a half months (every Saturday morning). The third group comprised over 100 young primary school children aged 7 to 13 spread out in tuition classes from 4 community centres. They received free tuition once a week from volunteer tutors who were trained very briefly on the first set of instruments in the Instrumental Enrichment programme. They tried teaching the thinking skills for about 2 to 3 months.

In this approach children are given problem-solving situations from which specific thinking processes which require further development are identified. The exercises are to help develop problem solving and inquiring minds. It was found that children who received the thinking programme improved their thinking abilities and interpersonal behaviour.

In 1990 and 1991, some “intervention” programmes were also carried out in Singapore secondary schools by National Institute of Education (NIE) lecturers in partnership with school personnel. Instead of adopting programmes developed overseas, specially tailored packages were developed through extensive interviews with principals and teachers and observations of students. The NIE team believe in the embedded approach, i.e., teaching learning strategies through a subject. The academic subject for intervention and the teachers to implement the intervention were identified by the principal. The selected teachers would then work with the NIE coordinators for at least 3 months to develop the programme before implementation.

Dr Philip Wong worked on Mathematics learning strategies at Secondary One level with teachers in the Serangoon Garden Secondary school. Pupils were encouraged to generate elaborations of what they learnt. For example pupils were asked to prepare their own vocabulary and terminology notebook with terms explained in their own personal manner through pictures, diagrams or worked examples. This was done individually and guided by the teacher. It is important that pupils create their own symbols, explanations, pictures, etc., as these would be more meaningful to themselves. A few examples of what some pupils wrote are as follows:

Odd numbers: “cannot divide by 2” e.g. I am 13 years old — cannot divide by 2.
numerator: 5 → numerator (Up)
denominator: 12 → Denominator (Down)

Another example involves the “Play the Examiner” game. After the students had worked at a few problems, the teacher would highlight special features of the problems. The teacher would show students how to “set” questions by working backwards, using the “reverse process”. For example, instead of finding the value of x in the equation, $5x + 10 = 20$, students were asked to work backwards by assigning any value for x and then constructing an algebraic equation from it.

For example: 1. Assign a value to x: Let $x = 7$
2. Generate an expression involving x: $3x + 10$
3. Work out the solution of the expression: $3(7) + 10 = 31$
4. Re-write it as a problem: $3x + 10 = 31$, find x

After having constructed a problem, pupils would then exchange their problems with their friends or classmates and they would then solve each other’s problems. This activity also exposed students to various strategies of checking answers by reversing the mathematical processes.

Bendemeer Secondary School, in the Project led by Dr Vanithamani Saravanan, opted for intervention in English at the Secondary Three level. One strategy, which applied in the vocabulary and reading comprehension and composition is called Concept Mapping, which attempts to represent super-ordinate, co-ordinate and sub-ordinate ideas or concepts within a schematic framework. Concept maps work to make clear to both students and teachers the key ideas they must focus on for any specific learning task. They may be used prior to reading or writing to connect with their previous knowledge about a topic and students in the recall and recognition of text information. After a learning task has been completed, concept maps provide a schematic summary of what has been learned.
Some examples of the remarks by Normal Stream students are as follows:

**Positive remarks:**
- "Concept Mapping – helped me understand the passage - increased my knowledge as I learned from linking ideas from the topic."
- "gave a chance to share opinions, share ideas - communicate in English."
- "enjoyed group work."

**Negative remarks:**
- "not helpful as I don’t have enough ideas."
- "group members do not help - makes it difficult."
- "it’s not for exams, so a waste of time – prefer grammar exercises as exam questions have grammar questions."

Another project, headed by Dr Goh Ngoh Khang and Dr Chia Lian Sai, involves intervention in Science at the Secondary Two level in St Theresa’s Convent. Among the study skills taught in the project are process skills, such as observational and inferential skills. For example, in training students to practise observational skills, opportunities are provided for them to select the appropriate observations and to write down their own observations and to compare and discuss the outcomes of observations. In training them to practise inferential skills, students are encouraged to look for information and data, usually obtained from experiments, which can support explanations. Results so far have been promising, especially since the teachers have been most enthusiastic.

At the Pre-university level, Mrs Tey Sau Hing worked on the intervention in Management Studies at the Outram Institute. She used a variety of strategies to help students apply management concepts and principles to make informed decision and solve problems. For example, chunking strategies were used to help students to organise the complex mass of information relevant to the discipline. Spatial chunking divides the syllabus into a macro- and micro-perspective or into the functional parts of business. Procedural chunking, with the help of flow diagrams, was used to learn the stages and steps of management functions. Interviews with students revealed that enthusiasm for the subject distinguished between the achieving and underachieving students.

**Some Tips for Parents and Teachers**

Parents and teachers play a significant role as motivators and facilitators in children’s learning. The following are some suggestions from research:
- Encourage children to be independent learners and thinkers.
- Try to resist the temptation of telling them what to learn and what to think.
- Value effort rather than marks.
- Help children to diagnose and overcome their learning problems.
- Stand by them at times of setbacks and help them to regain their self-confidence.
- Help and encourage them to plan and schedule their activities.
- Guide them in decision-making and create opportunities for them to make choices and decisions.
- Encourage independent problem-solving.
- Help children to focus their attention on objects and to look for details.
- Encourage them to be precise about things by insisting that they describe or say exactly what they want.
- Be generous with praise.

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### NIE STAFF’S CONTRIBUTIONS TO NTU ENDOWMENT FUND

As at 17 September 1992, the percentage of staff who have contributed to the NTU Endowment Fund is as follows:

<table>
<thead>
<tr>
<th>Division/School</th>
<th>No. of Existing staff</th>
<th>No. of Staff Pledged</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director’s Office</td>
<td>4</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Personnel &amp; General Affairs Division</td>
<td>17</td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Library</td>
<td>23</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>School of Arts</td>
<td>69*</td>
<td>8</td>
<td>12%</td>
</tr>
<tr>
<td>School of Education</td>
<td>63*</td>
<td>14</td>
<td>22%</td>
</tr>
<tr>
<td>School of Science</td>
<td>66*</td>
<td>19</td>
<td>29%</td>
</tr>
<tr>
<td>School of Physical Education</td>
<td>22*</td>
<td>7</td>
<td>32%</td>
</tr>
<tr>
<td>Centre For Applied Research In Education</td>
<td>3</td>
<td>1</td>
<td>33%</td>
</tr>
</tbody>
</table>

* Excludes staff on study leave and no-pay leave.

The above refers to those who have contributed via salary deduction. It does not include those who may have made direct contributions to the Fund.
The National Institute of Education (NIE) now has a logo to identify and reflect its identity as an Institute of the Nanyang Technological University which was formed from the former Institute of Education and College of Physical Education.

The NIE Logo which is shown here will be adopted with effect from 1 November 1992.

The NIE logo incorporates some icons of the coats of arms of the former Institute of Education (IE), the College of Physical Education (CPE) as well as the parent institution, Nanyang Technological University (NTU). The shape of the shield and the battlements are icons taken from the NTU coat of arms. The white, stylized outline of the lion is a version of the IE lion, which is superimposed on the red castle icon. The lion stresses the national status of NIE. The open book depicted in curvilinear pattern and in serene blue, is designed around the shield. The book is a universal symbol of education. The selection of icons is intended to reflect the new status of the merger between IE and CPE, and NIE as an institution within the Nanyang Technological University.

PRE-SCHOOL CONSULTANCY PROGRAMME 2ND CERTIFICATE-AWARDING CEREMONY

The second group of 218 participants from the Pre-School Consultancy Programme who began their training in February 1992 graduated in August this year. A Certificate-Awarding Ceremony for the graduates, who are child care and kindergarten personnel from the Ministry of Community Development's child care centres, PAP Community Foundation Kindergartens and private kindergartens, was held at the RLC Auditorium on 14 August 1992.

The Pre-School Consultancy Programme was inaugurated in response to the continuing national need for the training and upgrading of personnel for child care centres and kindergartens. The programme serves to improve the skills and knowledge of the participants as the quality of service provided depends very much on the teachers and the supervisors of these centres.

The contribution of the Consultancy Programme to the increasing pool of trained pre-school teachers in alleviating the shortage of trained Child Care staff was highlighted by the Guest of Honour Miss Lim Hsiu Mei, Deputy Secretary/Director Social Welfare. Miss Lim pointed to the dearth of fully trained staff prior to the Programme and indicated that with this second group, the pool of trained Child Care staff would be increased to 50% at Advanced Level and 37% at the Intermediate Level. She added that by the end of the second year of the Programme, it was envisaged that there would be a 77% increase in staff trained at the Advanced level and 57% at the Intermediate Level. Miss Lim went on to thank the National Institute of Education, in particular the Director, Professor Gloria Lim and her staff for developing the training programme.

In congratulating the participants, Miss Lim pointed to their roles as partners with parents in the child caring process and in meeting the changing expectations of parents. She stressed the need for teachers to communicate with parents and explain the essentials of their Pre-School Programmes so that they are reassured about the well-being of their children.

The third batch of 203 participants began their training in July 1992. Of the 203 participants, 133 are pre-school teachers enrolled for the Level One Course leading to the Certificate in Pre-School Teaching. The remaining 70 are senior staff and supervisors enrolled for the Level Two Course leading to the Certificate in Pre-School Management and Administration. The Pre-School Consultancy Programme aims at training some 1206 child care personnel and kindergarten teachers over the next 12 months.

Guest-of-Honour, Miss Lim Hsiu Mei addressing the audience.

Miss Lim Hsiu Mei presenting the certificate to a proud recipient.
FRESHMEN ORIENTATION 1992

This year's Freshmen Orientation opened on 2 July 1992 with a Welcome Address given by Director to new students. Besides bidding a warm welcome to the freshmen, she urged them to "put their best in their studies as good performance could mean for the degree programme students, the award of Honours and for the diploma and postgraduate diploma programme students, the award of diploma with distinctions, credits or ordinary passes." On a lighter note, the freshmen were also encouraged by Director to take part widely in the activities organised for them, "in particular those activities that are specially put up in line with the national campaign to promote a healthy lifestyle."

A tea reception followed after the welcome address to enable the new students to mingle with and get to know Director, academic staff and their seniors. Programme briefings were subsequently held by the Schools so that students could find out more about their course syllabus and subjects available for study.

Students met members of the Students' NIE Club during a forum organised for them on the second day of orientation. The purpose of the forum was to introduce them to the Students' NIE Club and provide them with an avenue to raise any queries pertaining to their studies or welfare in NIE. Judging from the overwhelming attendance and enthusiastic response from students to issues raised by the Club, it was clear that the forum was a success.

As in previous orientations, newcomers were presented with orientation packages comprising colourful T-Shirts, leather key chains and coin purse. Senior student leaders also serve as friendly guides to their juniors by bringing them on a "Know Your Campus" tour. The students' knowledge of the various buildings in NIE was put to test when they took part in an Orienteering game and uncovered certain strategic checkpoints around the campus.

For students who missed out on blockbusters like "A Fish Called Wanda" and "Robin Hood, Prince of Thieves", it was a certainly a big treat when these movies were re-run free of charge for them during the orientation.

In line with NIE's objective of encouraging students to live a healthier lifestyle, a NIE Mass Walk and telematch were organised on the third day of orientation. Besides injecting a lot of fun, the telematch also provided freshmen with a chance to develop teamwork and understanding with their fellow students.

A concert specially organised for the freshmen on 6 July 1992 evening was the highlight of the orientation. They were entertained by student groups from Bukit Timah and Jurong Campuses through a medley of songs, modern and gymnastic dance and live band rock music.

Rounding off the orientation was the Orientation Hop organised on 10 July 1992. Hopping till midnight, the students certainly enjoyed themselves. As one student aptly told those who missed the hop, "you should have been there to experience the fun and excitement, words simply cannot express the feeling of that evening."

With the orientation over, it was back to attending lectures, tutorials and handing assignments but the students were certainly looking forward to other activities organised for them on the campus.
CONFERENCES AND SEMINARS
JULY – SEPTEMBER 1992

INTERNATIONAL & REGIONAL

3 – 6 Jul
2nd International Conference on the Teaching Of Chinese (Hong Kong University)

Factors Affecting The Design of Chinese Language Curriculum (By Dr Chew Cheng Hai)

18 – 24 Jul
39th ICET World Assembly (UNESCO-ICET, Paris, France)

Reflective Review And Review Of Teacher Education In Asian Countries Vis-A-Vis Professionalisation And Professional Development. (By Prof Sim Wong Kooi)

20 – 24 Jul
National Conference of Music Education – Music In Cultural, Education and Mass Media Policies. (Chiba, Japan)

Music Education In Singapore (By Dr Sylvia Chong Nguik Yin)

26 Jul – 1 Aug
20th World Conference of the International Society for Music Education – Sharing Music of the World (Seoul, Korea)

In Tune With Ourselves (By Dr Sylvia Chong Nguik Yin)

2 – 7 Aug
IGU Geographical Education Symposium – 1992 (Colorado, USA)

An Exploratory Investigation Into The Decision-Making Ability Of Geography Students: Implications For Geographic Instruction. (By Dr Christine Lee Kim Eng)

14 – 18 Aug
The First International Conference on Chinese Language Testing (Beijing, China)

A Comparison Of The Mastery Between The Verbal And Written

LOCAL

24 – 26 September
Educational Research Association (ERA) – 6th Annual Conference (Plaza Hotel Singapore)

Attitudinal Outcomes from Environmental Activities (By Mdm Berinderjeet Kaur)

Graphs – What do they say? (By Mdm Berinderjeet Kaur and Mr Lim Chien Chong of Victoria Junior College)

Intrinsic Curriculum Evaluation (By Prof Sim Wong Kooi)

Singapore Students Are Rote Learners: Fact or Myth? (By Dr Agnes Chang Shook Cheong and Assoc Prof Ho Wah Kam)

Adolescents’ Relationships With Parents and Peers (By Dr Agnes Chang Shook Cheong and Miss Ang Mee Foong, M Ed Student)

Senior Management Teams in Schools: Improving Their Effectiveness (By Mr Kenneth R. Stott and Dr Allan Walker)

The Acquisition of Values: Are Schools Responsible? (By Dr Lily Wong)

Student Teachers’ Reflection On Classroom Practices (By Dr Chen Ai Yen, Dr Seng Seok Hoon, Mrs Tan Swee Chiew, Dr Moo Swee Ngoh and Mr Steven Tan)

Feeding NIE: Teacher Friendly Schools and Teacher Recruitment In Singapore (By Dr Leslie Sharpe)

One Section of the Learning Abilities & Disposition of the Primary Pupil Profile Project (By Mrs Muriel Lim-Quek, Prof Sim Wong Kooi, Dr Lily Wong, Dr Tay-Koay Siew Luan, Dr Cheung Kwok Cheung and Dr Chua Tee Tee)

Towards a Cognitive Curriculum for Pre-Schoolers (By Dr Seng Seok Hoon)

Science Laboratory Investigations: What Aspects Need to be Taught (By Dr Toh Kok Aun and Mr Yeo Keng Hoe)

Are Boys Better Than Girls in Physics? (By Dr Toh Kok Aun and Mr Sivakumar Alagumalai)

An Examination of the Use of Concept Mapping in Primary Science in Singapore (By Dr Jane Lloyd and Ms Cecilia Peralta of St Margaret’s Primary School)

Innovative Computer-Assisted Strategies in the Learning of Mathematical Concepts and Skills (By Dr Chong Tian Hoo and Dr Lim Suat Khoh)

The Development of Physical Education in Singapore – Directions from Oral History (By Mr John Essex Saunders)

What research has to say about children with movement skill problems? (By Ms Helen Clare Wright)

Research in Practice & the Practice of Research Within The Saturday Morning Art Programme For Primary Level Children (By Dr Jane Chia and Mr Birnie Duthie)

Children’s Responses to Questions about Transformations, A Study of the Thinking Strategies Young Children Use during Problem Solving. (By Dr Pamela Sharpe)

26 – 27 Sept
National Reading Month Seminar (Marina Mandarin Singapore)

Coping with your Child’s Reading Disability – The Hyperactive Child. (By Dr Pamela Sharpe)
SEMINARS ON EDUCATION RESEARCH

In collaboration with various Schools in the National Institute of Education (NIE), the Centre for Applied Research in Education (CARE) has been convening a series of seminars on educational research. These seminars are open not only to NIE staff but also to School personnel, Ministry of Education officers and others who are interested in finding out about some of the latest trends in educational research as well as some of the research undertaken by NIE.

The following seminars were conducted:

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Speaker</th>
<th>Organised By</th>
</tr>
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<tbody>
<tr>
<td>21 Aug 92</td>
<td>Innovative Interactive Multi-Media for Teaching and Learning</td>
<td>Mr Lou Cheng Teik Lecturer, School of Education</td>
<td>School of Education &amp; CARE</td>
</tr>
<tr>
<td>27 Aug 92</td>
<td>Personality Types of Singapore Students</td>
<td>Dr Lim Tock Keng Senior Research Officer CARE</td>
<td>CARE</td>
</tr>
<tr>
<td>2 Sep 92</td>
<td>School-Based Initial Teacher Training: Partnership Between University and the Schools</td>
<td>Prof Richard Pring Head, Department of Educational Studies Oxford University</td>
<td>School of Education &amp; CARE</td>
</tr>
<tr>
<td>8 Sep 92</td>
<td>Global Concerns in Mathematics Education</td>
<td>Mrs Berinderjeet Kaur Lecturer School of Science</td>
<td>School of Science &amp; CARE</td>
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</tbody>
</table>

STAFF WHO RETURNED FROM STUDY LEAVE

Mr Fong Ho Kheong
Lecturer
School of Science

Resumed duty on 13 August 1992 after submitting his Ph D dissertation in Primary Mathematics to the King’s College, University of London, UK.

Mr Lam Tit Loong
Lecturer
School of Education

Resumed duty on 5 September 1992 after completing a Ed D in the Area of Computerised Adaptive Testing Involving The Application of Item Response Theory at the University of Massachusetts, USA.

Mrs Lam Yok Yeen
Lecturer
School of Science

Resumed duty on 5 September 1992 after completing a Ed D in the Study of Students’ Conceptual Frameworks and Development with Special Reference to the Physical Science in Secondary Schools at the University of Massachusetts, USA.

STAFF WHO PROCEEDED ON STUDY LEAVE

Mr Chua Chee Lay
Senior Tutor
School of Arts

Proceeded on study leave from 29 August 1992 to 28 August 1995 to pursue a Ph D Degree in Chinese Linguistics at the University of Wisconsin, Madison, USA.

Ms Chua Seok Hong
Lecturer
School of Arts

Proceeded on study leave from 28 September 1992 to 27 September 1995 to pursue a Ph D Programme in Literature Education at the University of Chicago, USA.

Miss Jessie Ee Leong Choo
Senior Tutor
School of Education

Proceeded on study leave from 15 July 1992 to 14 July 1995 to pursue a Ph D Programme in Education at the University of Newcastle, Australia.

Ms Joyce Mok Chiu Fui
Senior Tutor
School of Science

Proceeded on study leave from 23 September 1992 to 22 September 1994 to pursue a MSc Programme in Family Resource Management at the Ohio State University, USA.

Mdm Leong Lai Keun
Senior Tutor
School of Physical Education

Proceeded on study leave from 14 August 1992 to 13 August 1994 to pursue a MA Dance Programme at the University of Hawaii, Manoa, USA.
The Institute extends a very warm welcome to the following staff members who assumed duty recently:

**SCHOOL OF ARTS**
- Dr Janet E Nichol  
  Senior Lecturer
- Mr David Melvyn Roskies  
  Senior Lecturer
- Dr David H Deterding  
  Lecturer
- Dr Swathi Vannarajan  
  Lecturer
- Dr Wong Shuang Yann  
  Lecturer

**SCHOOL OF EDUCATION**
- Dr Lachlan Edward David Crawford  
  Lecturer
- Dr Frances Louise Jessica Ball  
  Teaching Fellow
- Dr Narendra Dixit  
  Teaching Fellow
- Dr Zhang Yenming  
  Visiting Fellow

**SCHOOL OF SCIENCE**
- Dr Yap Kueh Chin  
  Senior Lecturer
- Dr Lim Siew-Lee, Shirley  
  Lecturer

**Mr Paul Maurice Edmund Shutler**  
Lecturer

**Dr Stuart Victor Springham**  
Lecturer

**Dr Yap Sook Fwe**  
Lecturer

**Mr Chan Yew Kok**  
Laboratory Technician

**Miss Gui Wan Ping**  
Laboratory Technician

**Mrs Yee-Lee Say Guck, Anna**  
Laboratory Technician

**Miss Pereira Mary Sheila**  
Secretary IIIB

**SCHOOL OF PHYSICAL EDUCATION**
- Dr Gordon James Schmidt  
  Senior Lecturer
- Dr Steven Charles Wright  
  Lecturer

**LIBRARY**
- Miss Mazenah Bte Ismail  
  Clerical Officer Grade B
- Miss Hamidah Bte Alwi  
  Library Attendant

**COMPUTER SERVICES CENTRE**
- Miss Chan Chor Ling  
  Analyst Programmer

**FINANCE DIVISION**
- Miss Fauziah Binte Abdullah  
  Clerical Officer Grade B
- Mrs Mislinah Binte Bakar  
  Clerical Officer Grade B
- Miss Low Sor Leng  
  Bookkeeper
- Miss Tang Soh Mon  
  Bookkeeper

**PERSONNEL & GENERAL AFFAIRS DIVISION**
- Miss Lim May Lin  
  Clerical Officer Grade B
- Miss Norhayati Binte Osman  
  Clerical Officer Grade B

**STUDENT AFFAIRS DIVISION**
- Miss Samerah Binte Tzoot  
  Clerical Officer Grade B
- Miss Sri Harlina Bte Ahmad  
  Clerical Officer Grade B

**MEDIA RESOURCE CENTRE**
- Mr Jailani Bin Abu Bakar  
  Technician

**DEVELOPMENT & ESTATES DIVISION**
- Mdm Loh Poh Kuy, Madelene  
  Clerical Officer Grade A

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**CONGRATULATIONS!**

To the following staff on his recently-announced promotion to Professorship (with effect from 1 August 1992):

**School of Arts**
- Assoc Prof John Kwan-Terry

To the following Acting Deans whose Deanship have been confirmed for the period 21 September 1992 to 29 February 1994:

**School of Education**
- Assoc Prof Ho Wah Kam

**School of Physical Education**
- Dr Quock Jin Jong

To the following staff on his appointment as Vice-Dean of his School for the period 21 September 1992 to 29 February 1994:

**School of Physical Education**
- Assoc Prof Ian Haslam

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**FRENCH ACADEMIC EXCHANGE PROGRAMME**

Prof Leo Tan, Dean, School of Science visited several research centres, institutions and universities in France under the French Academic Exchange Programme from 10 to 20 Sep 92. The purpose of the visit was to explore possibilities for collaborative research and/or academic staff exchange between NTU/NIE scientists and French counterparts in areas of biotechnology, agrotechnology and marine biology.

The visit paved the way for possible co-operation between NTU/NIE and the various institutions in France.
The Institute is pleased to have received the following visitors:

9 Jul 92
Prof R D Colle, Advisor to the Steering Committee for the School of Communication Studies of NTU.

22 Jul 92
Prof Melato Recias Malope, Vice-Chancellor and Mr Colin George Knowles, Director (Public Relations) of the University of Bophuthatswana – to study aspects of NIE administration and to have discussions on the work ethic of Asian people.

23 Jul 92
4 senior officials from the Malaysian Ministry of Education – to study the development and implementation of computers in education in Singapore schools.

27 Jul 92
A group of 12 officials from the Ministry of Education, Bangkok – to study about teacher education in Singapore.

28 Jul 92
A group of 14 officials from various Ministries in the People’s Republic of China – to study the courses and facilities available at NIE.

3 Aug 92
Prof Keith Swanwick from the University of London, Institute of Education, Music Department – to advise on our Music programmes.

7 Aug 92
Prof Alan J Bishop from the Faculty of Education, Monash University, Australia. Had discussion with Dean of Science and staff of the Division of Mathematics on “Culture, Language and Mathematics”.

24 Aug - 2 Sep 92
Prof Richard Pring, Oxford University. Visited us as External Examiner.

27 Aug 92
A group of 80 teachers from Thailand – to study teacher education in Singapore.

31 Aug - 4 Sep 92
Mr Mustafa Lufti, Deputy Director, Institute for Teacher Education, Maldives on a one-week attachment to NIE to study the management of teacher education institutions in Singapore.

2 Sep 92
Prof Adrian Webb, Senior Pro Vice-Chancellor of Loughborough University of Technology under the collaboration between the University and NTU.

4 Sep 92
Ms Tina Jarvis, Lecturer in Primary Education (Science & Technology), University of Leicester, England. Had discussions with staff of the School of Science and delivered a talk.

5 Sep 92
Dr Poovannan, Retired Prof from the University of Madras and Mr Sellaganapathy, Poet from India gave a talk to NIE students specialising in Tamil language.

7 Sep - 11 Sep 92
Dr Fred Inglis from the University of Warwick, Department of Arts Education under the collaboration with the Loughborough University of Technology.

11 Sep 92
Prof Nevo Baruch, Visiting Prof in the Department of Social Welfare & Psychology, NUS. Had discussions with staff of the Psychological Division of the School of Education.

16 Sep 92
A group of 7 officials from the Shanghai Municipal Education Bureau – to study our education system.

17 Sep 92
Prof Noel Vanzetti of the University of Canberra. Had discussions with senior NIE staff on the possibilities of cooperative activities in teachers training and academic exchange.

23 Sep 92
Prof John P Keeves of Flinders University of South Australia. Visited us as External Examiner for our M Ed Programme.

24 Sep 92
A group of 20 teachers from Griffiths University, Australia – to study about teacher education in Singapore.

24 Sep 92
Dr Adrian Wooldridge, member of the editorial staff of the ‘Economist’ magazine. Met with Director for an interview on our education system for the purpose of a survey of world education.
were the Aeroponics project which showed visitors a novel way of growing plants and marketing the technology, the faculty’s Nuclear Fusion Experimental Facility, applied biotechnology kits for diagnosis of nasopharyngeal cancer and other diseases and exhibits concerning environmental chemistry. Visitors were able to see demonstrations on enzyme activity, physical properties of waves, light, high temperature physics and the detection of trace metals in plant materials. The brewing of wine from local fruits such as durians, bananas and pineapples drew interesting responses from the more courageous visitors who described the fermentation products as “sweet”, “strong”, “very unique”. Innovative approaches to teaching were illustrated through student performances, hands-on exhibits and display-cum-demonstration of teaching materials, for example, the teaching of mathematics through manipulatives. The “Mathematics Trail Around NIE Campus” was indeed a journey of mathematics adventure and more than 100 successful participants were awarded with the badge “I conquered the Mathematics Trail”.

The School of Education mounted six interactive activities and displays on excellence in teacher education. These included a panel discussion on the experiences and possibilities in teaching, a participative microteaching session, a hands-on self-assessment career guidance activity featuring the “Jobs Orientation Backup System” (JOBS), simulation activities with teaching equipment from the world of specialised education and hands-on experience with multimedia packages and other computer-based instructional materials for classroom teaching. In addition, there were static displays on a range of guidance activities to enhance the all-round development of individuals on testing procedures and a workshop on how to help an individual to think better using “cognitive mutifiability” tasks. There was also a book exhibit of staff publications. All in all, the feedback from visitors was positive.

The School of Physical Education organised several major and minor games demonstrations. The highlight was the fitness-testing in the exercise physiology laboratory which ran from 9.00 am to 7.00 pm and the Biathlon in the swimming pool and grounds of the campus.

CARE’s Exhibition Room gave visitors a glimpse of the main thrusts of research in NIE Schools. On display too were research publications and key projects conducted under the Centre.

One of the many highlights of the day was a talk by Dr Tan Cheng Bock, MP for Ayer Rajah and Chairman, GPC (National Development) on “Politics and You” to pre-university students. Two other public forums “Enjoy Your Teenage Children” and “Myths, Misconceptions and Superstitions About Love, Courtship and Sex” and a panel discussion were also well attended.

Other student organised activities included telematches, charity trade fair and a concert. The NIE Symphonic Band ended the Open Day in the evening with a beautiful rendition of several band pieces.

VISIT TO SINGAPORE OF NINE TEACHING STAFF FROM UNIVERSITY OF NEVADA, LAS VEGAS

A group of 9 faculty members from the College of Education, University of Nevada, Las Vegas, visited Singapore between July 13 -31 to study the efforts made by Singapore, in particular, our teacher education programme, in preparing teachers to integrate the multi-cultural heritage, traditions and values into our system of education. The programme during their stay was coordinated by Dr Seng Seok Hoon of the School of Education and the group visited various schools, colleges and tertiary institutions as well as various ministries.

Various staff from the National Institute of Education and National University of Singapore were invited to conduct seminars on issues pertaining to our attempts in education to achieve multi-cultural harmony in such an ethnically diversified society. The group found the seminars and field trips very informative and enlightening and would apply the knowledge they have gained during the visit in their teacher education programmes at the University of Nevada, Las Vegas.