

# making education great

{ Transforming learning into enriching experiences  
relevant to personal and industry goals }



# FIRST-CLASS EDUCATION

## School of the Built Environment

The School of the Built Environment remained committed to extending and refining its educational offerings and learning experiences for students.

To ensure continued relevance to the industry, the Diploma in Architecture and Diploma in Civil & Structural Engineering courses underwent their five-year course reviews during the year.

Two proposed diploma courses – Diploma in Integrated Events & Project Management and Diploma in Environmental Management & Water Technology – would be available for the 2007-2008 intake.



During the year, students from the School of the Built Environment continued to challenge themselves and excel in industry competitions. Ten groups of final-year Diploma in Architecture students participated in a branding design competition initiated by CapitalLand, in which two walked away with grand prizes.

At the LTA/Polytechnics Collaboration Projects 2006, the School was awarded first prize for the project 'Deep Excavation Monitoring System'. Another two student projects, 'Maintenance-Free Solar Irrigation System' and 'Mosquito-Free Roof Gutter', won the second prize and merit prize respectively at the Greenwave Environmental Competition 2006 (Tertiary Level) organised by Sembawang Shipyard.

Internationally, four students won awards at the Bentley Systems CADD international competition. Diploma in Architecture student Jonathan Lim took first place in the University/Collegiate Architecture Category, while three Diploma in Civil & Structural Engineering students clinched the runner-up award in the University/Collegiate Engineering Category.



1. A new diploma in Environmental Management & Water Technology.
2. Winning project at the Bentley Systems CADD international competition.

Bringing further international accolades to the School, student Edison Pwee won the Hunter Douglas Design Competition with his project entitled 'Garden City Connection' and was invited to participate in the Archiprix Design Competition & Workshop in Shanghai.

In another international competition, a group of students, led by Dr Tao Nengfu, won an Earthquake Resistant Award at the 2006 APEC 'Introducing and Demonstrating Earthquake Engineering Research in Schools' Competition in Taipei. Locally, the NTU Earthquake Challenge 2006 also saw another group of Diploma in Civil & Structural Engineering students clinching the joint second prize.

In an increasingly global market, students and staff gained further experience through study tours organised throughout the year to Malaysia, China, Hong Kong and Australia.

Also, the School was presented with the Silver Award by the Ministry of Manpower at the Annual Safety & Health Performance Award 2006.

### **School of Business**

In its milestone 20<sup>th</sup> year, the School of Business continued to develop its curriculum to meet the changing needs of industry and to provide opportunities for students to participate in real-life scenarios.

From April 2007, second-year business students would be able to pursue a Specialist Diploma in Applied Business Psychology under the Diploma-Plus programme, in addition to their full-time diplomas.

Improving the marketability of its students, the School gained accreditation with the Singapore Human Resources Institute for its newly-launched Human Resource Management option under the Diploma in Business Administration course. It was a milestone for Singapore Polytechnic, being the first polytechnic to be accredited by Singapore's sole professional human resource authority.

One approach adopted by the School to expand educational horizons was to encourage students to participate in competitions. Doing the School proud, a student team emerged as champions in the National Management Competition, for the third straight year, earning the team the right to represent Singapore in the Asian Management Game at Macau. There, they did well enough to represent Singapore once again at the Global Management Game to be held in April 2007.

School of Business students, Chan Wei Khjan and Kelvin Wong, clinched the second and third prizes respectively from 350 participants in the Inter-Polytechnic Voyage of Life online game played in July 2006. And to mark Kenwood's 60<sup>th</sup> Anniversary, 100 final-year Diploma in Business Administration students took up the challenge to propose a marketing campaign at the Marketing Plan Competition 2007.



A marketing campaign for Kenwood.

Under the Polytechnic's Entrepreneurship Concentration programme, final-year business students ran their own enterprises for six months at the School's Entrepreneurship Incubation Centre as part of their coursework.



1. Real-life entrepreneurs among final-year students.
2. A designer bread fit for the Europeans!

Other students applied their research skills to discover interesting aspects about Singaporeans. A market research survey conducted by Diploma in Business Administration students found that Singaporeans were highly influenced by celebrity endorsements of fashion products. Another student survey was conducted as part of the Speak Good English Movement, while a survey by second-year Media and Communication students revealed insights into youths' attitudes on several issues like pre-marital sex.

### School of Chemical & Life Sciences

The School of Chemical & Life Sciences scored many achievements during the year in review. Innovation was rife as students enriched their learning experiences by attempting to create commercially viable products.

Six different flavours of 'Yamie Rice' which students of the School helped to develop were launched on 19 April 2006 by rice manufacturer Gan Hiap Lee. Students also gave a twist to the familiar curry puff by creating a version filled with chocolate and cheese which was then sold at outlets operated by 1A Crispy Puffs.



Diploma in Chemical Process Technology student Cecilia Ng developed a designer-bread for the European market during her training attachment to Fosters Bakery in the UK. She was featured as one of The Straits Times' 50 Outstanding Youths Under 25 for her achievement.

Students from the School were also recognised in industry competitions. A team comprising Diploma in Chemical Process Technology students clinched top prize in the newly launched polytechnic category at the Nanyang Technological University's Materials Science & Engineering Challenge 2007.

Progress was also achieved in expanding the range of specialities offered by the School with the introduction of three new Specialist Diploma courses in Biotechnology, Haematology & Blood Banking, and Cervical Cytology during the year. Another initiative was the launch of two Advanced Elective Modules – Gene Explorer and Introduction to Food Innovation – for secondary schools.



1. Training specialists in haematology and blood banking.
2. New School of Design students off to a good start.

Adding to students' learning experience too were the attachments to universities in Australia, China and Thailand.

### School of Design

The School of Design was set up in July 2006.



Off to a good start, students did their new School proud by performing well at local competitions. The IDC Design Excellence Award saw three Diploma in Interior Design students clinching gold, silver and bronze awards. Another three students clinched a merit award at the FLIP Competition organised by the Singapore Furniture Industries Council.

Diploma in Creative Media Design students performed equally well. At the Crowbar Award 2006, students earned one gold, six bronze and one Viewers' Choice awards. Two students were also among the top five entries in the Microsoft PhotoVista Competition. Other commendable creative achievements included a first prize in the Singapore Youth Commonwealth Photo Competition, second prize in the Pringles Design-A-Can Contest, second runner-up placing in the Channel U Uncut Logo Competition and a merit prize in the Montage 2006 Photography Competition.

Other practical experiences were gained from student work and collaborations with the industry. Students also engaged actively in study trips overseas to broaden their experiences. A trip to the Tokyo Anime Fair allowed staff and students to experience the latest innovations by anime creators from Japan and around the world.

By February 2007, the School of Design was ready to showcase the creative works of its first cohort of graduates. The inaugural Design Graduates Show 2007 was the premier showcase of Singapore Polytechnic's creative works through experience design incorporating aesthetics, humanities and social sciences, technology and the integrated use of various media.



1. A resounding success for the inaugural Design Graduates Show 2007.
2. Another gold at WorldSkills Singapore.

To bring more breadth to its academic offerings for future students, the Diploma in Experience Design (Interaction & Product) was launched.

### School of Electrical & Electronic Engineering

Among the initiatives taken by the School of Electrical & Electronic Engineering during the year was the restructuring of two of its diplomas and re-naming them the Diploma in Computer Engineering (previously Diploma in Computer Network Technology) and the Diploma in Electronics and Communication Engineering (previously Diploma in Electronics, Computer and Communication Engineering).

With the School's encouragement to focus on experiential learning, students applied their skills actively to real-life scenarios and to competitions during the year. At the WorldSkills Singapore 2006, students did the School proud by clinching two gold medals and earning the right to represent Singapore at the WorldSkills Competition Shizuoka 2007 in the 'IT PC/Network Support' and 'Industrial Control' trades.



Student teams fared just as well at the Singapore Robotics Games 2007, clinching a total of three golds, two silvers, one bronze and one special award. Students from the School also bagged a silver award at the Korea Intelligent Robot Contest held in Andong City, South Korea, in September 2006. At the RoboCup 2006 Competition held in Bremen, Germany, the robotic team, Field Ranger was placed fourth in the Small Size League, while the RoboErectus team was placed third in the Humanoid League.

The School's Diploma in Information Communications Technology team also won first prize in the Infocomm Competition Quiz organised by the Singapore Science Centre and IDA, before moving on to emerge overall second runner-up in the combined National Infocomm Competitions. First prizes were also in store for a team who participated in the Splash Awards 2006 – 3G Live!, and the Polytechnics/ITE Circuit of the Virtual X Game Competition.

The Polytechnic Student Research Projects 2006/07 awarded Best Project Awards to two student teams. In other student achievements, Kenneth Ng Choon Guan, a final-year Diploma in Electrical & Computer Control Engineering student, received the James O Gray – Fieldbus Foundation Scholarship.

### **School of Mechanical & Manufacturing Engineering**

Learning at the School of Mechanical & Manufacturing Engineering provided many unique opportunities for students to push the limits of their skills and to gain local and international recognition.

The fifth IES Design Award presented a bronze award to a student project on the 'Improved Elbow Continuous Passive Motion' machine. At the WorldSkills Singapore challenge, students bagged two gold, three silver and three bronze medals and two diplomas.



1. A victorious moment at the Singapore Robotics Games 2007.
2. Seeing gold at WorldSkills Singapore.



Students represented Singapore Polytechnic to win the overall first prize at the inter-tertiary institution Pro/E Design Competition for the sixth consecutive year. Two other students were selected by the Singapore Youth Flying Club to represent Singapore in the 2006 Control Line Aeromodelling World Championships in Spain in July 2006.

Prestige was in store for seven students who were presented with the National Youth Achievement Award by the President of Singapore. In the area of scholarships, two students received the Lee Kuan Yew Scholarship Award 2006, another two students the PSC Provisional Scholarship 2007, and two others the PSA Scholarship Award 2007.

To enhance the learning experience further, the Aeronautical Laboratory took delivery of a Cessna 310 aircraft and an A4 aircraft engine as teaching aids. Renovation of the new Industrial Project Centre was completed in September 2006.



Touch down for a Cessna 310 at the Aeronautical Laboratory.

Three new Advanced Elective Modules for secondary school students were planned for and offered in the new academic year. The modules in visual thinking, design communication and creative modelling would offer them more scope to develop their creative skills.

### **School of Media & Info-Communications Technology**

At the School of Media & Info-Communications Technology, plans were underway to allow academically stronger students to stretch their potential and enhance their value when they seek employment after graduation. From academic year 2007-2008, they would be able to take the Specialist Diploma in Digital Media Creation as a Diploma-Plus programme.

The School had a busy year. Lecturers and first-year students from the Diploma in Infocomm Security Management programme organised their first IT Security Awareness Day with talks and fun-filled activities to raise security awareness among students and staff.



Giving students more opportunities to broaden their minds, the School organised a study tour to Hong Kong for 30 students accompanied by two lecturers.

Students also participated and excelled in several competitions and awards. Diploma in Music & Audio Technology student Rex Teo won the Humanistic Songwriting Competition and subsequently represented Singapore to clinch three awards at the grand finals in Taiwan. The School also fielded four out of six participants in the Singapore Polytechnic team that won the first prize for Best Music Business Marketing and Promotion at the inaugural Artiste & Repertoire Challenge.



1. Reaching out to students and staff at the IT Security Awareness Day.
2. Singapore Polytechnic team wins Top prize for Best Music Business Marketing and Promotion at the inaugural Artiste & Repertoire Challenge.

From the Diploma in Business Information Technology, student Kimberly Kan won a merit award in the SP Microsoft Office Specialist Challenge 2006, while another student Augustine Chan was awarded the prestigious IDA National Infocomm Scholarship. Teams from the Diploma in Information Technology course also bagged the third prize at the SMU Innovate IT Challenge, the Business Award at Sun Microsystems' JavaJive Challenge, third runner-up placing at the Splash Awards National Infocomm Competition 2006 and both first and third placings at NUS Computron 06.

At the Anti-Drug Multimedia Competition, a team of Diploma in Multimedia Technology students took the distinction award for a short film 'Cold Fever'. And at the Crowbar Award 2006, School of Media and Info-Communications Technology students won one gold, six bronzes and one Viewers' Choice award.

Another student, Muhamad Yazid bin Muhd So'od from the Diploma in Multimedia Technology took third prize at the National Scriptwriting Competition (Feature Film Category) held in conjunction with the Panasonic-MDA Digital Film Fiesta. Diploma in Digital Media student, Lim Wei Yi won the top prize and the third prize at the Capitaland Retail Crème Awards 2007, while Gerald Khoo, also from the same diploma course, won the Platinum Most Creative Award at PC Magazine's Digital Imaging Competition 2006.



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### Singapore Maritime Academy

The Singapore Maritime Academy made the learning environment even more vibrant with the presence of international students from China, India, Myanmar, Malaysia, Mexico and Nigeria during the year.



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1. Platinum Award and Most Creative Award winner of the Digital Imaging Competition 2006.
2. Cadets from the SS Pallada training ship on campus.

About a hundred cadets and trainers from the SS Pallada, a training ship from the Far Eastern State Technical Fisheries University of Russia also visited the Academy in February 2007. In addition, Ms Sunny Tang Fuli from the Qingdao Harbour Vocational and Technology College arrived for a three-month attachment as part of a staff exchange programme.

More opportunities for cultural exchange were available to students when 11 students and a lecturer were invited to take part in the first International Maritime University Festival organised by the Maritime State University, Vladivostok, Russia, in September 2006.

And in December 2006, 24 students and two lecturers made a Maritime Interest Excursion to Malaysia. Additionally, 15 students were chosen to complete an Overseas Industrial Training Programme which involved attachments to diesel manufacturing plants in Weifang, China.

To provide onboard experiences for students, the Academy transformed the decks of the SuperStar Virgo into a temporary campus for several student training activities including the Generation Y Leadership Camp and the Maritime Experiential Learning Camp. More onboard opportunities were open to 123 students who visited and toured the MV Doulos, which was berthed at the Singapore Cruise Centre in November 2006.

As a result of its efforts, Singapore Maritime Academy received its fifth consecutive Lloyd's List Maritime Asia Award in November 2006. The Academy had received the award in 2000 and 2002 for Best Seafarer Training Institution and then in 2004, 2005, and 2006 for Youth Development.