

PolyU develops intelligent toys

A fine example of industry-academia partnership was set as the PolyU and the Toys Manufacturers' Association of Hong Kong (TMAHK) signed a co-operation agreement on January 22.

Under the agreement, the Association and its members will commit a total of more than \$1 million in the form of donation and payment of service fee for the PolyU's Rapid Product Development Syndicate (RAPRODS) and the PolyU Technology and Consultancy Company Limited (PTeC). An "Innovative Toy Products Development Centre" in RAPRODS in support of the toy industry and TMAHK members would be established.

Speaking at the ceremony, Prof. Poon Chung-kwong highlighted that the agreement was the first of a series of co-operation agreements which the PolyU expected to enter into with industrial



TMAHK President Mr. Danny Ngai Kam-fai (5th from left) and Prof. Poon Chung-kwong (5th from right) with representatives from both parties.

and business associations. "This is one of the most unique programmes ever undertaken by any universities in Hong Kong," he said.

The agreement would underpin a close, mutually beneficial linkage between toys manufacturers and engineering experts at the PolyU. Prof. Poon was fully confident that such investment would pay off when the local toy industry shared the fruits of technological and design innovation originated from this project.

Mr. Alexander Tzang, PolyU's Vice-President and the mastermind behind the initiative, believed that the University and industry would have more opportunities to co-operate in future, such as collaborative activities in mid-stream technology and innovative product development, management and executive development training.

Grooming senior mainland executives

The PolyU's role in training senior Chinese executives for world-class performance has become more important following the signing of a co-operation agreement with the State Administration of Foreign Experts Affairs on January 23 to establish a training centre in Beijing. The centre will be the first of its kind set up by a university in Hong Kong in collaboration with a training bureau at national level.

The State Administration of Foreign Experts Affairs is a national government department which oversees the introduction of foreign expertise, management of matters relating to foreign experts working in China, and overseas training of Chinese personnel.

The centre will help step up China building a strong connection with the international market by nurturing high-calibre personnel for enterprises on the mainland. It will run high-level training programmes, seminars and exchange activities for senior managers and executives of state-owned, township, privately owned and joint venture enterprises.



Agreement signed by Mr. Yang Hanyan and Prof. Poon.

For multinational companies, tailor-made in-company training programmes will also be offered. Diagnostic services as well as management and development consultancy services for individual enterprises will help develop medium- or long-term training schemes for their senior management.

Under the agreement, the PolyU will provide the training expertise and teaching materials, acquire the relevant training facilities and fund part of the initial operating costs while the requisite administration offices and training

venues will come from the State Administration.

PolyU's Vice-President Mr. Alexander Tzang stressed that the University had always taken an active approach to its collaboration with mainland institutions in promoting professional and executive training. One milestone was the establishment of an International Executive Development Centre, serving as the PolyU's training outpost on the campus of Zhejiang University two years ago. "The setting up of the new Centre in Beijing this year will be another proof of our commitment in this respect," he said.

Manulife centre for children with specific learning disabilities opens

The Manulife Centre for Children with Specific Learning Disabilities (SLD), located in the PolyU, was officially opened on January 28.

The opening ceremony, co-organized by Manulife and the University, marks the first donation by the “Manulife Charitable Foundation Limited”, a non-profit-making organization established in December 1998 by Manulife (International) Limited. The goal of the Charitable Foundation is to generate and donate funds to support and promote educational, health and charitable activities for the betterment of public welfare. The Foundation has allocated HK\$1,800,000 over three years to the centre.

“We searched for an initiative to support which matched our objective of contributing to education and Hong Kong children. In Dr. Alice Cheng Lai’s programme we found an area that has been vastly under recognized and where our support could really make a difference,” said Alice Chow, Vice President and Chief Financial Officer,

Hong Kong of Manulife International and Vice-Chairman of Manulife Charitable Foundation Limited.

“Manulife is not only concerned about providing benefits to its policyholders and investors, but also the special needs of our society. We are taking the initiative to offer a hand to our next generation, and help them develop the skills they need to thrive in our society.”

Dr. Alice Cheng Lai, person-in-charge of the Manulife Centre for Children with SLD said: “SLD children are ‘normal’ individuals who made their learning disability by compensating in other ways.”

Key problems that SLD children face are reading and/or language difficulties due to cognitive differences or brain dysfunction. These difficulties can be overcome by proper learning strategies and by detecting and addressing the problems early enough.

“We believe children with SLD are talented individuals. LD means learning difference in each individual child,” said Dr. Cheng Lai. “With



(From left) Mr. Philip Hampden-Smith and Ms. Alice Chow from Manulife; Dr. Alice Cheng Lai and Prof. George Woo from the PolyU.

Manulife’s help, I hope that my research and the work that we do at the centre will help to change the way that educators in Hong Kong think, and remove the stigma that the families of SLD children feel.”

The centre’s mission is to take a leading role in the development of children with SLD in Hong Kong by providing academic and professional services such as assessment, training and counselling to children and their parents.

Each year, the centre will hold three Children-Parental Workshops during Easter, Summer holidays and Christmas, and three free Open Seminars for public. Each workshop will take 40 – 60 children and their parents and will consist of two parts: a three-day Children’s Camp and a four-weekend parental workshop. The purpose of the workshop is to identify children’s learning problems and potential, and develop correctional programmes for the parents and children so that they can practise these programmes at home. ❖



Ms. Alice Chow (left) presents the cheque to Prof. Poon Chung-kuong.

Forging ahead with innovative information technology



(From left) PolyU's Mr. Richard Li, Mr. K.C. Kwong, Secretary for Information and Technology and Broadcasting, President Prof. Poon Chung-kwong and Mr. Dickson So from BOC Credit Card (International).

At the Symposium on "Y2K Readiness in Tertiary Institutions" hosted by the PolyU in mid March, President Prof. Poon Chung-kwong revealed that the University would be fully prepared to tackle the millennium bug and complete all essential testing by June 30 this year.

Addressing the opening ceremony of the Y2K Symposium cum the PolyU's "IT Showcase 99", a two-day event promoting the innovative use of information technology in the university settings, Prof. Poon said, "The Polytechnic University is well ahead of schedule in its master plan for Y2K compliance."

The PolyU, with the support of the Bank of China Group's BOC Credit Card (International) Ltd, is the first tertiary institution in Hong Kong to adopt Secure Electronic Transaction (SET) technology to accept payment on the Internet.

Each year the University receives about 28,000 direct applications from working individuals. The new facility surely brings much convenience to the applicants who want to apply for various part-time programmes. This one-stop-shop service allows applicants to both submit their application through the PolyU website and action payment online in a secured manner.

The University is working towards further using SET technology to accept transcript application fees from graduates, consultancy fees from business partners, and miscellaneous fees from students.

SET is a standard protocol developed by international credit card associations and their technology partners to enable secure online credit card payment on the Internet. This technology has been widely adopted by major banks worldwide. By employing

digital certificate and public key encryption technologies, SET enables a high level of security for payment on the Internet for both the payer and the payee.

Mr. Richard Li, PolyU's Director of Information Technology Services, said the PolyU had adopted advanced encryption technology to set up its own Certification Authority System to issue Digital Certificates to staff and students. "As soon as our Certification Authority System is linked up with the root Certification Authority of Hongkong Post, which will be set up late this year, Digital Certificates issued by the PolyU will be accepted territory-wide."

The University has launched a number of important IT initiatives in the 1998/99 academic year to enhance electronic communication and services. The new initiatives include the PolyU Smart Card, used as the identity card for staff and students, and the PolyU Intranet, through which staff and students can access the University's online services and useful internal information.

The Senior Management of the University has taken the lead to promote a paperless office by using electronic communication.



Mr. K.C. Kwong tries out the hi-tech application at one of the booths.

"Now that all notices and announcements are broadcast effectively through the internal e-mail system, colleagues can even schedule meetings and make appointments among themselves in their electronic diary built in with the system," Mr. Li added.

The PolyU "IT Showcase '99" comprised a large-scale exhibition on campus, featuring innovations in teaching and university administration with the use of advanced information technology. Fifteen university departments and 19 leading technology services providers, including IBM, Novell, Oracle and Sun Microsystems, took part in the exhibition.

Nurturing biomedical professionals

Budding biomedical scientists trained by the PolyU can now enjoy a distinct advantage in keeping abreast of up-to-date medical laboratory practice and biomedical technologies with the official opening of its new Biomedical Science Teaching and Research Laboratories in January.

As a supportive arm of the Department of Nursing and Health Sciences, the Biomedical Science Teaching and Research Laboratories have been established with resources and equipment worth more than \$20 million. The Laboratories have been fully refurbished to promote biomedical science knowledge and skills and to facilitate high-level research in the area.

Dr. Danny Gohel, Head of the Biomedical Science section of the Department, said the section has experienced tremendous growth in the past 20 years. "The advances in molecular biology, immunology and laboratory automation have made a great impact on training and meeting the demand for qualified biomedical scientists for clinical laboratories."

"Today, we are proud to be the only tertiary institution providing a broad programme of scientific studies, covering all four disciplines of biomedical science, namely Cellular Pathology, Clinical Chemistry, Haematology and Transfusion Science and Medical Microbiology, on a full-time basis," he said.

President Prof. Poon Chung-kwong is particularly glad that the new Laboratories provide a healthy and safe environment for staff and students. They have been upgraded with proper chemical storage facilities, proper chemical waste disposal, chemical fume hoods, spark-proof fridge and freezers, eyewashes and showers as well as proper setting for handling potentially hazardous biological samples.



Prof. Martinson (right) expresses gratitude to Dr. Leong.



Touring the new laboratories.

Dr. the Honourable Leong Che-hung, member of the Legislative Council, President Prof. Poon and Prof. George Woo, Dean of the Faculty of Health and Social Studies, officiated at the opening ceremony on campus.

The new Laboratories, comprising a number of teaching and research laboratories tailored for specific purposes, include:

- *Clinical Chemistry and Cellular Pathology Teaching Laboratory* – for conducting investigation by using analytical chemistry methods of blood and other biological materials using mainly automated methods and requiring high levels of accuracy
- *Medical Microbiology and Haematology Teaching Laboratory* – for identifying micro-organisms that cause diseases and test antibiotic sensitivities to antibiotics used in treatment
- *Flow Cytometer and Cell Sorter Research Laboratory* – for studying cell differentiation and monitoring the immune status of individuals such as those afflicted with AIDS by using monoclonal antibodies
- *DNA Electrophoresis Laboratory* – for conducting separation of most of biomolecules including DNA and proteins
- *Tissue Culture Laboratory* – for cultivating and growing cells for the testing of drugs, toxins, chemicals, dietary agents and cellular products on gene expression and regulation, and on various aspects of cell metabolic functions
- *Walk-in Coldroom* – for conducting research in a controlled temperature environment

The modern and highly advanced medical facilities will enable students to gain hands-on experience by familiarizing them with real medical laboratory practice in hospital or private pathology laboratories. On the research front, the upgraded facilities put the Department in a better position to further strengthen research in biomedical science and training of its postgraduate students. ❖



Dr. Leong Che-bung (left) and Prof. Poon Chung-kwong jointly unveil the plaque.

KFC and McDonald's become PolyU's partners in training students



Dr. Pine and Mr. Richard Wong (right) from KFC



Dr. Pine and Mr. James Ip (right) from McDonald's

With the tremendous support from industry partners, PolyU's Department of Hotel and Tourism Management is in full swing grooming students in real working environment. The department has recently signed a Co-operative Education Partnership Agreement with the Kentucky Fried Chicken (KFC) and McDonald's respectively.

The Agreements provide degree students in Hotel and Catering Management an excellent opportunity to undertake on-the-job, comprehensive training in KFC's and McDonald's fast food restaurants for five weeks during summer.

The Agreement with KFC was signed in February by Dr. Ray Pine, Head of the Department, and Mr. Richard Wong Yip-

wing, Director of Operations of KFC, while the Agreement with McDonald's was in March by Dr. Ray Pine and Mr. James Ip, Vice President, Management of McDonald's Restaurants (HK) Limited.

The new initiatives with the two internationally known chains were warmly welcomed by Dr. Pine, who said the Agreements manifested all parties' commitment to cultivating the talent for the future development of Hong Kong's fast food industry. The initiatives form part of the University's on-going 'Preferred Graduate' Development Programme, under which more than 190 local and overseas companies and organizations provide placement opportunities for PolyU students during summer.

"The scheme will bring mutual benefits for all parties concerned. It will not only help the students bridge the gap between theory and practice, but also give the employers a chance to recruit, train and evaluate potential future managers," Dr. Pine commented.

He was also confident that highly qualified and well-trained graduates who were ready to "hit-the-ground-and-run" could be produced through this valuable programme.

Dr. Pine added, "The programme indeed provides a win-win situation for both our students and the partner companies. The PolyU will continue to explore further opportunities for long-term co-operation in future."

Rehabilitation Sciences commemorates 20th anniversary

March 20 marked the beginning of a new era for the Department of Rehabilitation Sciences as staff and students celebrated merrily the Department's 20th anniversary.

The past two decades have witnessed the remarkable expansion of the Department. Not only does it serve as an example of the University's commitment to the development of the caring professions in Hong Kong, it has also demonstrated quick responsiveness to social needs.

Prof. Christina Hui-Chan Wan-ying, Chair Professor and Head of the Department, commented that the recent change from structured to credit-based curricula would facilitate students' acquisition of specialized



Prof. Christina Hui-Chan Wan-ying welcomes all to the auspicious occasion.

knowledge through the provision of newly created professional electives. Also, the momentum in the research arena would increase, thus strengthening the link between the Department and its clinical collaborators through further development of evidence-based practice.

"Besides the partnerships formed in Hong Kong, we will cement even firmer links with the key medical universities on the mainland by helping them to establish their own education programmes," added Prof.

Hui-Chan.

The University has just earmarked \$10 million from its internal resources to set up a "Centre for East-meets-West in Rehabilitation Sciences" as one of the "Areas of Strategic Development".

New exam course becomes popular

The Centre for Professional & Business English (CPBE) reports an encouraging response to its new Business English Certificate (BEC) courses. Not only have student enrolments increased for classes run at the PolyU, but the first in-house company courses have now begun, with more in the pipeline.

The number of students of the current course has increased 50% over that of the previous course held in December last year. With at least six more intakes planned for 1999, and a rapid-growing interest of companies in BEC, the new programme is already making an impact on the language training scene in Hong Kong. CPBE is confident that more and more organizations will use the programme to enhance the performance of staff and ultimately to benefit the companies.

In early 1998 CPBE was approved as a centre for BEC by the body which administers the exam, the University of Cambridge Local Examination Syndicate. The Certificate courses are offered at

three levels and cover the development of the four skills, i.e. listening, speaking, reading and writing.

One of the main attractions of offering these externally benchmarked courses and certificates in Hong Kong is that they are fast becoming the norms for English language proficiency on the Chinese mainland where approximately 30,000 participants took the three BEC exams last year.

The other attraction is that BEC offers Hong Kong the prospect of a long-overdue language benchmark for its own workplaces. Many businesses on the mainland are beginning to use it for entry purposes, appraisals, promotions, and even for the purposes of sending employees off on overseas assignments!

Further details of the BEC courses are available at <http://www.engl.polyu.edu.hk/cpbe>.



The CPBE team.

Reviving interest in Design and Technology

"We live in a high technology society. In simple terms this means that our way of life, our standard of living and the wealth of our country is dependent upon the manufacture of sophisticated products and, of course, all of these have to be designed."

James Garratt

As the number of secondary school students entering tertiary institutions continues to grow, so is the need to develop a close tie between secondary schools and tertiary institutions. The Manufacturing Engineering Department of the PolyU, with the help from other departments of the University, takes the lead to introduce the Design & Technology Awareness Programme. Funded with the amount of HK\$1,488,000 by the University Grants Committee (UGC), the interface programme aims to establish an effective communication channel in the design and technology area between the tertiary and secondary sectors.

Design & Technology (D&T) is part of the school curricula in secondary schools. The curriculum of the subject is designed to teach students the applications of modern science and technology and their impact on the economic activities of Hong Kong and people's daily life. Unfortunately D&T has been misconceived as an outdated and unimportant subject in the past years. There is also another misunderstanding that there are very few industries left in Hong Kong, thus offering little prospects for those pursuing careers in industry. The misconceptions have resulted in youngsters lacking an interest in studying science and engineering. In the long term, this will affect our industrial competitiveness and hinder Hong Kong from becoming an innovation centre in the region.

With the implementation of the Awareness Programme from this year to year 2000, it is hoped that a better understanding of D&T will be generated.



The first workshop of the Awareness Programme has attracted more than 40 secondary school teachers.

The action plan of the programme consists of three main activities, namely producing a multimedia CD-ROM package, organizing a competition as well as workshops/seminars.

The CD-ROM will be widely circulated in secondary schools to arouse students' interest through a series of interactive electronic design activities and illustrations.

As for the competition, it is intended to provide students with an opportunity to utilize their unlimited imagination and allows them to grasp the crux of D&T through the process of self-innovation. The competition will be staged in summer.

A series of seminars and workshops for secondary schools on the teaching of D&T will be conducted. The first workshop, "State-of-the-art Development in Computer-

Aided Design", specifically targeted at D&T subject teachers, has been held. Due to the overwhelming responses from secondary school teachers, a second workshop of the same theme will be organized in May.

The opening ceremony for the Awareness Programme took place in April on the PolyU campus. Joining President Prof. Poon Chung-kwong to officiate at the ceremony were Legislative Council member Dr. Hon. Raymond Ho Chung-tai and Assistant Director of Education Mr. Tam Chun-kit. The ceremony was followed by a forum on Education of Design and Technology, the panel of which included representatives from Hong Kong Subsidized Secondary Schools Council, Education Department, the PolyU, Hong Kong Productivity Council, Hong Kong Association for Design & Technology Education and secondary schools.

A Working Committee for the programme has been formed, which includes representatives from The Hong Kong Polytechnic University, the Hong Kong Education Department, the Hong Kong Examinations Authority, The Hong Kong Institute of Education, the Hong Kong Association for Design & Technology and secondary schools. This committee, chaired by Prof. W. B. Lee of the PolyU, serves as both an advisory board and a decision-making board.

Facelift for Optometry Clinic

On January 15, PolyU, the sole provider of tertiary education in optometry in the territory, opened its newly refurbished Optometry Clinic. President Prof. Poon Chung-kwong officiated at the opening ceremony. The auspicious event was hosted by Prof. George Woo, Dean of the Faculty of Health and Social Studies, and Prof. Maurice Yap Keng-hung, Head of the Department of Optometry and Radiography, and was attended by five eminent Chinese experts in optometry:

During their visit, the Chinese scholars also held a symposium on "Optometric Education in China" on the PolyU campus to share and exchange their views with the local academics.

The PolyU has been providing vision care services for some 20 years. Run by the PolyU's Department of Optometry and Radiography, the Optometry Clinic serves some 6,000 patient visits each year. Not only staff and

students benefit from the service of the clinic, the facility is also used by the general public.

"The advanced equipment in the clinic is used for rendering quality eye care services to patients, for teaching students in pre-clinical years as well as for some

laboratory sessions. The clinic is indeed essential for the operation of our four-year BSc(Hons) degree programme in Optometry. Our MPhil, PhD students and staff members carry out their research projects in the clinic as well," Prof. Woo said.

Looking ahead, Prof. Woo stressed the importance to develop specialist services within the Clinic. "Specialist services in the areas of electrophysiology, orthokeratology, orthoptics and low vision will be made available to the public through referrals by optometric and medical practitioners."

The opening ceremony also celebrated the establishment of the Clinic's Visual Electrophysiology Centre. In addition to offering services in the four areas of primary care, contact lens, paediatric and visual training, and ocular health services, the Clinic can now provide a detailed electrophysiological examination of the entire visual system. Electrophysiological techniques are widely used in the assessment of retinal disease.



Prof. Zhao Kanxing (left) receives a souvenir from Prof. George Woo.



Prof. Poon Chung-kwong (right) and guests test the 3-D imaging equipment at the Clinic.

- Prof. Zhao Kanxing, Vice-President, Tianjin Medical University and Head of Tianjin Head Hospital

- Prof. Jimmy Yan, Head of Department of Ophthalmology, West China Medical University

- Prof. Ge Jian, Head of Department of Ophthalmology, Sun Yat-sen University of Medical Sciences

- Prof. Wang Jing, Head of Department of Ophthalmology, Zhejiang University

- Prof. Song Huiqin, Head of Department of Optical Technology, Tianjin Professional University

