



A "switch-on" ceremony marks the opening of the Asia Pacific Conference on Co-operation Education. From left: Mr. Tzang, Mr. Rowley, Mr. Wong, Mr. Zhu, Prof. Liu Huanbin (President of the South China University of Technology), Prof. Fan Bouyuan (Vice-President of the China Association for Co-operative Education, and Prof. Poon.

Reviving the economy through co-op education

By Linda Yeung

One way companies struggling through the Asian financial crisis could adopt to ride out the storm is by improving their workforce. But how? One useful means is to work together with education institutions which groom the staff they need. And this is an area where the concept of co-operative education comes into play.

It is not an entirely new concept; back in 1991, The Hong Kong Polytechnic University hosted a world conference on behalf of the World Association for Co-operative Education (WACE), an international body which has since 1983 championed for practice-oriented education on a global level. Its mandate is to promote and advocate partnerships between business, industrial sectors and academic institutions to enable students to integrate academic knowledge and practical work experience related to their field of study.

The same idea of integrating work and knowledge was emphasized again at this year's Asia Pacific Conference on Co-operative Education, held at the PolyU in late August. The event was

participated by more than 200 delegates from 20 countries and territories, among whom were academics, educationalists, government officials and business and industrial representatives.

In the run-up to the millennium, educational alliances between governments, businesses, professional organizations and educational institutions could help companies buck negative economic trends.

Forming such alliances has also long been the goal of WACE, now with 750 members around the world and which also provides grassroots assistance to developing and industrialized countries that hope to launch co-operative education linkages.

And the PolyU shares its beliefs. Over the years it has maintained strong ties with the community with its expanding range of consultancy, professional training and applied research services.

In some of the PolyU's programmes,



At the WACE Council meeting, Representatives discuss the development of WACE in different countries.



The President Prof. Poon (right) presents to Mr. Rowley a souvenir during the opening ceremony of the co-op education conference.

such as hotel management and engineering, a sandwich mode is adopted, under which students are required to undergo practical training between classroom lectures as part of their study.

Also notable is the PolyU's continual partnership with the business and industrial sectors in providing student placement programmes. Through its unique 'Preferred Graduate' Development Programme, the University provides internships for its students to put their theoretical knowledge into daily operation in the workplace during the summer holidays.

PolyU Vice President Mr. Alexander Tzang summed up the importance of outside classroom experience: "Training should not remain static. It should respond to a changing environment. If students can be equipped with the skills demanded to understand the real working environment, their productivity at work will be enhanced."

The University has, of course, manifested its belief in the importance of work-based learning through hosting the latest



Mr. Tzang extends a warm welcome to the conference delegates.

conference on co-op education.

Speaking at the opening ceremony of the Conference, PolyU President Prof. Poon Chung-kwong reiterated the importance of co-operation between various sectors in the society.

He said: "The Polytechnic University is particularly suited to organize this esteemed event as, since the institution's inception [in 1972], it has been a strong advocate of the belief that the education sector, the private sector and the Government must maintain close links and work closely for the continuously development of the community.

"We are also committed to combine work and study on education while promoting the co-operative education movement worldwide."

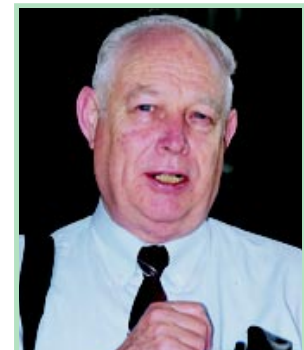
The officiating guest at the ceremony, Mr. Joseph W.P. Wong, Hong Kong's Secretary for Education and Manpower, urged that industry could render more financial support for the education and research efforts of local institutions. "Institutions in Hong Kong now receive

only about one per cent of the research funding from private sources, compared with seven per cent in the US and the UK," he said.

Former WACE president Prof. Murray Gillin, whose two-year term just expired before the Conference commenced, commented that the PolyU is a leader in co-op education in the Region, saying: "I am not aware of any other university that has as long, strong, committed past as the PolyU."

He expressed confidence that the trend of co-op education will continue to prosper: "Knowledge comes not by knowing, but by doing.

"From an economic perspective, companies have to make avenue out of the investment they make in education." At the Swinburne University of Technology



Prof. Gillin

What is 'Co-operative Education'?

Co-operative Education combines learning in the classroom with learning on the job. Students put their academic knowledge into action through relevant (and, usually, paid) work experiences with real-world employers, then bring their on-job challenges and insights back to class for further analysis and reflection.

Co-op is:

- a highly effective educational strategy.
- a mutually beneficial partnership between education and industry.
- an economical means of developing a nation's human resources.
- a sound strategy for helping students, businesses, and governments succeed in a global economy.
- a strong foundation for a student's lifelong learning.
- a highly adaptable model of education.

— World Association for Co-operative Education

in Melbourne, where he has been a pro-chancellor prior to his recent retirement, graduates of its co-op education programmes have had the lowest unemployment rate.”

His successor at WACE, Irish industrialist Mr. Joseph Rowley, is equally convinced of the value of similar programmes. Like Prof. Gillin, he is serving the group on a part-time, voluntary basis. But despite his own business involvement, he said he is prepared to travel extensively in the next two years to promote the cause of WACE in the developing world.

“Institutions in Hong Kong now receive only about one per cent of the research funding from private sources, compared with seven per cent in the US and the UK...”

“I’ll be coming to Asia, where there are already different models in operation,” he said while here during the Conference. “Co-op education is a way of making economic recovery happen quickly, because the more educated the workforce, the more successful it can be.”

As Chairman of the Dublin-based AGB Scientific Ltd., Ireland’s largest supplier of scientific instrumentation and services, he is one shining example of a visionary entrepreneur. His company has maintained a long-standing and productive partnership with Dublin City University and other educational institutions that utilize co-op education programmes. He believes firmly in the mutual benefits that such programmes



Mr. Franks

can bring to both employers and students.

“We’ve hired many co-op students,” he said. “It’s a top way to recruit people. It’s good for the students as well because they can familiarize themselves with the workplace, and bring that experience into their college and studies. They are enriched.”

Naturally, having prior work experience provide students with better ideas on what career path to take later on.

The August conference offered an opportunity for people like Mr. Rowley to exchange views and examine issues with others sharing similar interest and concern in the Region. Not least of all, it also allowed for an exchange of knowledge about the development of co-op education in some Asian nations such as Japan, Indonesia and Malaysia where the concept has not yet taken root.

Chief Executive Officer of the Boston-based WACE, Mr. Peter Franks, agreed on the need to raise the awareness of the industry side as well. Hence he expected the next conference, scheduled for next July in Washington D.C, to be possibly the biggest meeting ever, to include even more industry representatives. A key message that WACE has persistently tried to impress upon company owners is that hiring co-op students is much more than a cost-cutting exercise.

“Companies can gain immediate help and make better judgment on what students to hire when they graduate. If the students are staying with the company, they get people already trained, who have a better sense of how to operate in a work environment, how to make things happen and get things done,” said Mr. Franks.

At present, a variety of co-op education models are flourishing in different parts of the world. Students in Commonwealth countries, for example, are often placed for a full year in a job, in a field specific to their studies.

In the US, an estimated 50,000 employers — public, private and non-profit

— are hiring co-op education students, utilizing a variety of models, some of which call for a three-month or six-month work term.

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In China, against a background of rapid economic reforms, the past decade has seen rapid development in work-study programmes. After more than ten years of explorations and experiments, more than a hundred academic institutions and several hundred enterprises are now involved in implementing those programmes, undertaken by not just undergraduates and



Dr. Zhang at the WACE Council meeting.

graduate students but also junior college students.

Indeed, China’s heavy emphasis on the development of science and technology creates a favourable environment for collaboration between universities and industries. As revealed by Director General of the Shanghai Municipal Government’s Education Commission, Dr. Zhang Weijiang, co-op education has become much wider in scope than before; rather than being strictly learning-oriented, new models have emerged which are geared towards promoting scientific researches and product-development, and which could also help facilitate reforms in the business and industrial sectors.

Asian Pacific Co-operative Education Conference held

The Asia Pacific Conference on Co-operative Education, hosted by the PolyU, opened on August 24. The forum attracted to the campus more than 200 educationists and scholars, government officials and members of the business and industrial sectors from 20 countries and territories.

The theme of the five-day Conference was "The Industry and Academic Symbiosis — A Global Partnership", a very relevant topic to the current global as well as local economic and political climate.

Officiating at the opening ceremony of the Conference, held in the Grand Ballroom of the Harbour Plaza Hotel, was Mr. Joseph Wong Wing-ping, Secretary for Education and Manpower. Other Guests-of-Honour at the gala ceremony were Mr. Joseph Rowley, President, World Association for Co-operative Education; Mr. Zhu Chuanli, Deputy Director of the Higher Education Department, China's Ministry of Education; Prof. Liu Huanbin, President, South China University of Technology; and Mr. Fan Boyuan, Vice-President, China Association for Co-operative Education.

The event, co-organized by the China Association for Co-operative Education, comprises a three-day programme in Hong Kong, followed by a two-day excursion to Guangzhou organized by the South China University of Technology.

Under the auspices of the World Association for Co-operative Education (WACE), the regional conference is held biennially for educationists and employers to discuss the integration of academic knowledge and practical work experience.

To address the development of co-operative education, six eminent

speakers were invited to deliver keynote presentations during the Conference:

- Dr. David B. Lowry, Vice-President, Office of Social and Development Programs, Freeport McMoRan Copper and Gold Company, U.S.;
- Dr. Zhang Weijiang, Director General, Education Commission of Shanghai Municipal People's Government, China;
- Dr. Ng Tat-lun, Deputy Chairman, Vocational Training Council and Managing Director, Operations, Global Lighting Products, Eveready Battery Company, Inc., Hong Kong SAR;
- Prof. Brian Low, Deputy Vice-Chancellor and Vice-President (Academic), University of Technology, Australia;
- Prof. Abadallah A. Sfeir, Dean, School of Engineering and Architecture, Lebanese American University, and General Secretary (1992-97), International Association for the Exchange of Students for Technical Experience (IAESTE), Lebanon;
- Dr. Maurits van Rooijen, Director, International Education University of Westminster, UK. (See related story on the keynote presentations from page 21 to 23.)

Lion dance at the welcome banquet: Mr. Wong officiating at the eye-dotting ceremony.



He acknowledged: "For universities and colleges, their graduates are significantly improved in their practical ability as well as their theoretical knowledge."

One model of co-op education being experimented at Tsinghua University in Beijing and Shanghai Jiaotong University, for example, involve joint researches by faculty members, graduate students and industrialists. Such researches are seen to be of value to the country's future economic reconstruction.

But potential difficulties do lie ahead in promoting co-op education on a wider scale, as Deputy Director of the Ministry of Education's Higher Education Department Mr. Zhu Chuanli admitted. Although the Chinese Government is in support of the idea, free market competitions have increased pressure on many enterprises to cut costs and reduce personnel; many are hence unwilling to take on co-op students. Traditional, conservative thinking is another obstacle, as many colleges and universities

remain solely concerned about passing on knowledge. Likewise, most enterprises have paid little attention to the training of qualified personnel, according to Mr. Zhu.

In any case, with the work of WACE and universities like the PolyU which act as strong advocates of co-operation with outside bodies, time should see positive changes in the attitudes of members of the academia and other sectors across the Region.

Linda Yeung is a special correspondent of Profile.

工商學界致力合作教育 有助亞洲走出經濟困境

經過亞洲金融風暴的洗禮，不少企業機構均會意識到，要克服目前困境，便必須要提高僱員的素質。教育機構專門培訓各界需要的人才，工商界與它們聯手合作，便是一個可取的方法，這亦正是合作教育的基本理念之一。

其實合作教育的概念並非始自今天，早在一九八三年成立的世界合作教育協會一直倡議實用為主的教育方法，積極鼓吹工商界與學界建立夥伴關係，幫助學員把知識與實際經驗融匯貫通。今年八月，協會第二次在香港召開亞太區合作教育會議，並再度由香港理工大學主辦（上次主辦年份為一九九一年），吸引來自二十個國家與地區共二百多位代表參與。

現時協會共有七百五十個會員機構分處於世界各地，協會一直鼓勵政府、工商界與教育界攜手合作，與香港理工大學的教研方針不謀而合。

理工大學與工商界一直保持緊密聯繫，為社會各界提供顧問、專業培訓與應用研究等服務。理大的課程以實用性強見稱，部分課程更採用廠校交替制，讓學員有一年時間在外實習。此外，大學亦透過「首選畢業生培育計劃」，每年為僱主提供優秀學生在暑期工作。

理大副校長曾慶忠先生強調：「培訓人才不可以一成不變，學員必須能掌握面對實際工作環境的技巧，才可以在日後盡展所長，增進機構的生產力。」

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理工大學主辦最近的亞太區合作教育會議便是將這種理念付諸實行。理大校長潘宗光教授在會議開幕典禮上重申，理大會堅守信念，把實際工作經驗融於教學過程中，並協力在世界各地推廣合作教育。

在開幕典禮上，政府教育及人力統籌局局長王永平先生更呼籲工商界在財政上支持本地大學，支持院校的教研工作。他說在英國和美國，大學有百分之七的研究經

費來自私營機構捐贈，但香港卻只有百分之一，兩者相距甚遠。

是次合作教育會議由理大與中國產學研合作教育協會合辦。會議首三日在香港舉行，與會者隨後赴廣州考察，並參與由華南理工大學主辦的第二節會議。

剛卸任的世界合作教育協會前任會長格禮文教授總結在任兩年的經驗，盛讚香港理工大學是亞太區內促進合作教育的先鋒。他說：「論投入合作教育的時間與熱誠，在亞太區內可說無出其右了。」格禮



The conference in session at the PolyU.
亞太區合作教育會議召開。

文教授深信，合作教育會繼續蓬勃發展：「從經濟角度看，大機構希望在教育方面的投資取得回報。」由他從事教育工作多年觀察經驗所得，合作教育課程的畢業生不愁工作出路。

格老的繼任人路利先生為愛爾蘭最大的科學儀器公司 AGB Scientific Ltd. 主席，他相信合作教育有助經濟快速復原，因為勞動人口受教育愈多，工作效能愈大。路利先生的公司與都柏林市大學保持長久合作的良好關係，因為他相信合作教育課程無論對僱主和學員均有益處。

協會行政總裁范思平先生認為，公司聘用修讀過合作教育課程的畢業生並非只為削減成本。他說：「公司可以得到即時的好幫手，亦更容易決定該聘用哪些畢業

生。已在公司實習過的畢業生如選擇留在公司，公司便可得到一批肯定能投入工作的生力軍。」

目前合作教育在世界各地有多種不同的模式運作。英聯邦國家較多採用一年制實習模式，在美國則估計有近五萬名僱主以各種形式聘用合作教育課程的學員，有些為期只三至六個月。

隨著中國日益改革開放，近十年來有愈來愈多學術機構與私人企業參與合作教育，培育本科生、研究生以至中學生。由於國家政府著重「科教興國」，為大學與工商界發展合作關係締造了有利的環境。

據上海市教育委員會國際協作部主任張偉江教授表示，合作教育在中國的發展不再侷限於為學生提供實習，嶄新的合作模式著重發展科研與產品設計，幫助工商界進行改革。他說：「現時的大學畢業生和中學畢業生的理論基礎固然好，實際處事的能力也有大大提升。」

在北京清華大學與上海交通大學，合作教育採用研究模式，由教員、研究生與工業家攜手合作。可以預見，類似的研究結果對國家未來的經濟發展影響甚大。

另一方面，中國教育部高等教育司副司長朱傳禮先生指出，在中國推行更大規模的合作教育仍存在一定困難。雖然中國政府支持合作教育這理念，但是自由市場競爭所構成的壓力，令企業對控制成本和聘用人手更加審慎。此外，仍有很多學校和大學只著眼於傳授知識，要改變這傳統觀念並非一朝一夕可以做到。

無論如何，只要世界合作教育協會的工作能持續下去，如理工大學一樣的教育機構能繼續促進學界與外界加緊合作，合作教育在學界和整個亞太區當會有更大的發展。