As specialists are asked to perform more managerial tasks, the need for management development is increasing. To meet this growing demand, the Hong Kong Polytechnic University joins with the University of Warwick in England to introduce to Hong Kong the Integrated Engineering Business Management Program that has been very successful in the United Kingdom because of its relevance and practicality to society's actual needs. It is a unique part-time modular course for practicing managerial staff. The broad spread of faculty drawn from the constituent universities ensures that course content is relevant and constantly updated to reflect the latest advances in technology and practices. This industry-led program adopts a multidisciplinary approach and aims to develop students to appreciate modern management technology, broaden knowledge in technical and managerial areas, and to analyze problems and synthesize solutions through case studies. Academic staff and industrial supervisors collaborate on course management and operation. The global network of learning venues offers wide exposures to various cultures. Students may attend modules in different countries with freely transferable credits. Since 1990, more than 1,200 professionals sponsored by 600 companies have joined the program. Current participants number over 400. (YLB)
Sunday 9 April, 2000

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Crossroads of the New Millennium

Learning Knows No Borders

Prepared and Presented

By

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Workshop 2

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Abstract

Specialists are being asked to perform more and more managerial tasks. The need for management development increases in gathering speed. To meet this growing demand, the Hong Kong Polytechnic University joins with the University of Warwick in England to introduce to Hong Kong the Integrated Engineering Business Management Programme which has been very successful in the United Kingdom on account of its relevance and practicality to the actual needs of the society. It is a unique part-time modular course for practising managerial staff. The broad spread of faculty members drawn from the constituent universities ensures the course content is relevant and constantly updated to reflect the latest advance in technology and practice.

This industry-led programme adopts a multi-disciplinary approach and aims to develop students to appreciate modern management technology and to broaden knowledge in technical and managerial areas to analyse problems and synthesize solutions through a wide range of case studies. Academic staff and industrial supervisors collaborate on course management and operation. The global network of learning venues offers wide exposures to various cultures. Students may attend modules in different countries with freely transferable credits. Since 1990 more than 1,200 professionals sponsored by 600 companies have joined the programme. Current participants number more than 400.

**Keywords:** international experience, globalisation of education, joint corporate-academic professional development, multi-disciplinary enrichment opportunity
Learning Knows No Borders

THE HONG KONG POLYTECHNIC UNIVERSITY
The Hong Kong Polytechnic University (PolyU) is the largest government funded higher education institution in Hong Kong. In 1999 there were 26,000 full-time and part-time students.

Courses taught at the University cover a wide range of subjects most of which are vocationally oriented and include engineering, business studies, and health care studies. It is an internationally recognised centre for the provision of continuous professional training, consultancy and applied research services. It ranks first among Hong Kong institutions in meeting the community needs, providing courses of practical value and moving with the time. In broad terms the University makes significant contributions towards the territory success by providing the public and private sectors through strong partnerships with business and industrial sectors.

THE MANUFACTURING INDUSTRY IN HONG KONG
In the past two decades or so China reverses its closed-door policy, by adopting an open one. It welcomes foreign investments to set up manufacturing plants within its jurisdiction. In the Chinese regions bordering Hong Kong the labour cost is only 10% of that in Hong Kong and the cost of land is much lower. Cashing in on these costing benefits many business concerns relocate their manufacturing operation from Hong Kong to China. It is found that a much larger labour force may be employed without an appreciable increase in, if not reducing the total labour cost. And this is the generally adopted practice.

The relocation of the manufacturing plants entails the transfer of technology or know-how from one place to another. Many middle level managerial staff based in Hong Kong finds that they have to communicate to a much larger labour force but of less industrial inclined. Unlike before when they are in close proximity reducing the obstacles in communication to the bare minimum they now have to control the labour force over a much longer distance. The technical staff is often confronted with managerial issues, which they have not had any previous training to deal with. The need for management training is ever increasing to meet the changing operating environment.
MANAGEMENT DEVELOPMENT IN HONG KONG

Many resort to educational establishments for the necessary training. They find the access to management development programmes is often qualified by previous academic endeavour. This puts those who were, for some reasons in the past, denied the opportunity of the main stream schooling in some disadvantageous positions. The PolyU, constantly advocating the importance of practical aspects, votes to help these people caught in between and explores channels for assistance. The partnership with the University of Warwick in England is established with the above being one of the major objectives.

THE UNIVERSITY OF WARWICK, UK

The University of Warwick (Warwick) in the United Kingdom ranked fourth among UK tertiary education institutions for quality of research by University Funding Council in 1997. It, like the PolyU, attaches great importance to applied-oriented knowledge. Its Manufacturing Group, with 350 staff members, is probably the largest operation of its kind in the world with major centres in Hong Kong, China, Malaysia, Thailand, India, and six European cities. Over the past 15 years the Group has developed a substantial reputation particularly for its post-graduate and post-experience training programmes which can now be regarded as a model of industry-academic partnership with industry playing a full collaborative role in the design, development, delivery and monitoring of the programmes.

THE INTEGRATED ENGINEERING BUSINESS MANAGEMENT PROGRAMME (IEBMP)

The PolyU working with Warwick launched a programme to support Hong Kong industry. The platform features a new modular programme of management training which consists of three tiers, namely, the Engineering Doctorate Programme (EngD), the Integrated Graduate Development Scheme (IGDS) and the Integrated Manager Development Scheme (IMDS) leading to the awards of the doctorate degree in engineering, master degree of science and the post-experience diploma, correspondingly. All the awards are granted by Warwick thereby ensuring international credibility. The programme is modelled on one that is being currently operated in the United Kingdom by Warwick with the support of many major British companies. It is designed to provide an executive development programme to develop practicing managers in industry. This part-time programme adopts a 'system' approach with emphasis on the practical use of subject content and three tier structure with easy entry and exit facilities located at strategic points are interlinked to offer further study advancement opportunities to participants.
THE INTEGRATED MANAGER DEVELOPMENT SCHEME

To illustrate the operation of the Programme IMDS is cited. There is no formal academic qualification for admissions but favourable consideration is extended to candidates with maturity and substantial working experiences. Successful completion of the Scheme leads to credit transfer opportunities into the M Sc level IGDS programme. Subsequent credit transfers to the Ph D equivalent EngD programme are also possible. Students, having successfully completed 12 out of 16 modules and 2 in-company projects within the two years registration period, are eligible for the award of Post-Experience Diploma in Engineering Business Management. Diploma holders are eligible for Fellowship of the Institute for Supervision and Management of the United Kingdom.

THE MODULES

The IMDS modules cover a wide range of subjects, from general business topics such as Corporate Management, through management skills like Team Working, to advanced technology such as Robotics. Each module consists of 20 hours of intensive lecturing, tutorials, seminars and practical activities and is run on the PolyU campus. On average attendance is required once every five or six weeks. Teaching faculty is drawn from staff of the two constituent universities and specialists from other universities, industry and research organisations and consultancy practice. This broad spread of teaching support ensures that the course contents are relevant and constantly updated to keep abreast of latest advance in technology and practice. Each module is followed by an assessment in the form of a brief questionnaire session. At Warwick there are more than 50 modules offered to students throughout the year. In Hong Kong the number is curtailed by the availability of lecturing staff, local relevance and other constraints.

QUALITY ASSURANCE

Each module concludes with a module review, which is designed to aid continuous improvement of the module and facilities. Participants are asked to contribute in the following ways:

- individually review each session,
- individually review the module, and
- participate in a group discussion on the module at the end of the module.
The session reviews provide a full range of feedback to monitor the scope and relevance of the content, and the effectiveness of the communication during the sessions. Changes in content, notes or speakers will be made if necessary as reviewed. The overall module review provides a balanced feedback to monitor the relevance of the objectives and the extent to which they have been addressed and met. The group discussion and presentation made afterwards further balance the feedback but also allow the module tutor the opportunity to clarify any misunderstandings, which may have arisen, and to respond to the most significant comments.

TUTORIAL SYSTEM
Each participant is assigned an individual tutor. The participant and tutor meet regularly to discuss and monitor progress of study. The tutor is also a source of guidance and advice to the participants. In particular, the tutorial system is proven of great value to assist participants in re-entering the academic environment after a long absence and to restore their confidence in the process of self-enrichment, thereby ensuring that the efforts devoted are well justified.

THE PROJECTS
Each student is required to complete two job related projects, each being over a 3-month period. Each project is expected to spend 80 - 100 hours of effort and will be presented in the form of written dissertation, backed by oral presentation, if necessary and assessed by two supervisors, one industrial and one academic. These projects help to:
- transfer learning from the university to the workplace,
- widen participants' knowledge and understanding of the company, and
- provide real benefits from the Scheme to the company.

THE PARTICIPANTS
Participants are current or emerging supervisory or managerial staff in engineering or industrial companies and public bodies. They do not require formal qualification, academic or otherwise, to commence the Scheme, but normally have several years of relevant working experience and a level of intellectual capability and personal drive to meet the demands of the programme. A satisfactory level of proficiency in working with the English language is also required, as the medium of instruction is English.
GLOBAL NETWORKING
Apart from Hong Kong, Warwick operates the Scheme with corresponding local partners in various locations in the world, namely, the United Kingdom, Malaysia, South Africa, Thailand, India, and China. Participants are given opportunities, and very often encouraged, to attend parts of the programme in locations other than Hong Kong. Thus they are exposed to different cultures, the understanding of which would be beneficial to the potential career and personal development of participants.

THE ROLE OF INDUSTRY
Industry is represented on a Steering Committee, which defines the course scope and monitors its operation. The Committee meets at regular intervals. Detailed module design and course deliveries are carried out in collaboration with industrial partners. Industry also provides teaching members so as to ensure the coverage of the practical aspects. Industry is benefited from the enhancement of the quality of participants after the course and the result of the project work, which is drawn from real issues in daily operation, not fictitious exercise for the sake of exercise. Performances of the participants are jointly assessed by the academic and industrial faculty members.

A SUCCESS STORY
Sponsored by the British government, Warwick started the IEBMP in 1981. The programme involves over forty blue chip British companies. In Hong Kong, the programme was launched in 1990. It has been sponsored by leading local enterprises though the government assumes a passive role. The number of participants surpasses the 1,000 mark. Current active participants number more than 400. Industry hails this cross boundary, international and intercultural, multi-disciplinary, industry-academic collaborative programme providing excellent human resources development functions. Participants find the programme providing application oriented knowledge appropriate for their further career developments. A number of tertiary institutions in China have asked or are negotiating for collaborative joint ventures.

CONCLUSION
Companies who recognise the need to develop their managerial staff require a flexible, responsive programme tailored to their needs. This comprehensive programme is a proven approach, with a strong emphasis on partnership with industry and relevance throughout. Its success is substantiated by the wide spread of sister operations in various parts of the globe.
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