

Igniting the spirit of innovation



Kicking off the second contest: (from left) Dr Lui, Mr Chan, President Prof. Poon Chung-kwong and Deputy President Mr Alexander Tzang.

Some of the world's most successful products and innovations started out as ideas and sketches on paper. But even the brightest ideas cannot blossom without the right nurturing environment. In our rapidly changing and competitive business environment, the key to success must unlock many doors – doors that lead to opportunities, challenges, and ultimately – the winning formula.

In encouraging students to explore new ideas in innovation and technology, and in continuously striving to provide them with practical experience before they enter the workplace, the PolyU-IDT Innovative Entrepreneur Contest has been hitting all the right notes. An integral part of PolyU's Innovation and Technology Incubation Programme (ITIP), this contest provides an opportunity for student teams to pull their resources together and to follow their entrepreneurial

1st PolyU-IDT Innovative Entrepreneur Contest: Roll of honour

Category	Project (Department)	Winning team
<i>General</i>	A Low Cost Internet Controlled Video Monitoring System (Department of Mechanical Engineering)	Billy Fung Pei-lee (leader) Chan Chak-on Chan Wai-hong Mak Sui-shing Tang Siu-ling
<i>e-Game & Toys Products</i>	Development of the Online Games in Thin-clients Devices (Department of Computing)	Lo Chi-wing (leader) Chan Mei-yung Wong Ka-man
<i>e-Learning Products</i>	FeaFur-Advanced Software Technology for Thermal Functional Design of Textiles (Institute of Textiles & Clothing)	Burley Wong (Leader)

dream in creating a new product. The winners can even get a taste of success if their idea eventually becomes reality and is launched in the market through ITIP.

The first contest, co-ordinated by PolyU's Institute for Enterprise through its Partnership Development Office and sponsored by IDT International Limited, achieved highly encouraging results when it was launched last year. With the second contest now running at full throttle, it won't be long before another batch of young entrepreneurs are born.

Winning is only a start

Part of the reason for the increasing popularity of the second PolyU-IDT Innovative Entrepreneur Contest has to do with the fact that there is already a success story involved. One of the winning teams, led by mechanical engineering student **Billy Fung Pei-lee**, is getting a taste of being a real entrepreneur. Their project, a low-cost Internet controlled video monitoring system, earn the highest score and is already in its first step of commercialization.

This ingenious device, which uses the power of the Internet to achieve the effects of close circuit video monitoring, will be available to the public soon, at an estimated cost of \$400 per set. "I really entered the contest just for fun and experience. I did not expect to win," Billy said. "Until now, I did not realize that there are so many challenges in doing business."

Billy and his teammates are all in the same class. He wanted to do something with the Internet because he wants more people to utilize this network. However, the team also realises that developing a product from concept to materialization takes perseverance and patience. "We are very fortunate to get a lot of help from our professors," he observed.

"But the most difficult part is in writing the final business plan. We are engineering students, but we had to learn accounting and business principles too." Billy feels that winning the contest is only the first step – there are many steps ahead. "To create something and to launch it in the real world is an entirely different issue. It is something that we can't learn from books, something that we have to try ourselves." Although he is hopeful that the product will do well, Billy said the lessons learnt from the project had given him the confidence to face future challenges. "In this society we have to stay competitive, I can apply the same principles to a future job."



The award-winning team: (from left) Chan Wai-hong, Billy, advisor Dr Wong Wai-on, Tang Siu-ling, Mak Sui-shing and Chan Chak-on.



Winners of the first contest posing with staff and guests.

A multidisciplinary approach



Dr Lui: *it's about teamwork.*

According to **Dr Lui Sun-wing**, Vice President (Partnership and Continuing Education), the contest is a testimony of the University's commitment to grooming talent for the knowledge-based economy of the future. "This is a new concept for us, and it is in line with our philosophy of concentrating on applied learning," Dr Lui said. "In using a multidisciplinary approach, we encourage our students to think creatively and to develop their business sense."

Of course, the 'winning formula' can't simply be taught in textbooks. Experience, trials and errors also count. All these ultimately become a foundation for each student to prepare himself for the working world. "This is a culture we want to promote in our university, that is to apply what they have learned," Dr Lui continued. "The role of a university is to not merely to teach students facts and give them knowledge; it is to prepare them to manage it."

He stressed that the real world never stays constant, but experience in handling change, building relationship with others and using common sense and logic are all ingredients in a solid foundation. "This is why the contest has been so successful: it combines creation and application, giving engineering students exposure to concepts in marketing, accounting and business. We offer for students a chance to deal with the real-life challenges of building a sound business."

As for the first contest, the second PolyU-IDT Innovative Entrepreneur Contest is open to all full-time students. Each team has an academic advisor and entries could be submitted under five categories, namely, electrical appliances and health care products, IT applications, telecommunications and personal devices, toys, and others.

The contest is staged over two rounds. The preliminary round, which closed in October, required each team to submit a two-page executive summary for their product. Those teams that successfully enter the final round need to complete a full business plan by January 2002, and winners are selected by a panel of judges made up of faculty, industry advisors and sponsors.

The winning team in each category will be granted a cash prize of \$25,000, plus the opportunity to be awarded other monthly stipend allowance and subsidies for other expenses for further developing their work. Subject to the University's approval, each winning team is expected to join an Innovation Incubation Unit formed under the ITIP, and may thus get a jumpstart in marketing their products to the public through joining Innovation Incubation Units.

What it means for industries

As the contestants ultimately set their sights on penetrating the real market, industry support plays an important role in the contest. **Mr Raymond Chan**, Chairman and CEO of IDT International Limited, has generously donated \$1 million to the contest for its first two years. He also dedicated time to sit on the judging panel. "I am very impressed and surprised by the quality of the projects submitted by the students," Mr Chan said. "The ideas are solid and the products are very sophisticated. Obviously a lot of thought and efforts went into the projects."

Mr Chan holds that in an ever increasingly competitive economy, contests such as this carry multiple benefits. "It not only affords students a chance to gain experience, but also facilitates ideas – ideas that may materialize and benefit society,



Mr Chan: *contest carries multiple benefits.*

First PolyU-associated company listed on stock exchange

Another shining example of innovation is the diesel particulate trap developed by PolyU. It is now one of the leading products of the joint venture company Eco-Tek Holdings Ltd. (company code 8169), newly listed on the GEM board of the Hong Kong Stock Exchange on 5 December 2001.

PolyU's wholly owned subsidiary Advance New Technology Ltd. holds 16.1 per cent share in Eco-Tek. Chaired by Dr Lily Chiang, recipient of the Outstanding PolyU Alumni Award 1999, the company specialises in providing environmental protection solutions. The listing was well received by the investment community, with the stock being oversubscribed 60 times prior to listing.

The diesel particulate trap is an applied R&D project was conducted by Dr Cheung Chun-shun, Mr Chan Sui-ling, Mr Chuen Chun-wah, Dr Eric Fung and Mr Lo Kok-keung of the Department of Mechanical Engineering, and Dr Hung Wing-tat of the Department of Civil and Structural Engineering. The low-cost device alleviates environmental pollution by trapping around one-third of particulates emitted from the engines of light duty diesel vehicles. The technology was successfully commercialized and the listing coordinated by the Institute for Enterprise.

and create more jobs and opportunities," he said. "This has a very positive effect for Hong Kong's industries as it helps groom more talent for the market."

Mr Andrew Young, Head of the Partnership Development Office, has overseen the implementation of the contest from its conception to fruition. "One of the roles of the Partnership Development Office is to monitor market functions, to develop business partnerships, and to understand what industries need," he said.

"In this context I feel the objective of this contest is really unique, because it is through real-life experience that students acquire the practical context. It is not an experiment; it is integrated with outside industries, giving our students a whole spectrum of exposure and experience."

According to Mr Young, the model of the contest is based on a very successful programme initiated at the Massachusetts Institute of Technology (MIT). "This is something that not only bring together students, but academics and professionals as well," Mr Young remarked.

Throughout the contest, the teams receive valuable support from the University. These include advice from academic staff, use of campus equipment and facilities, subsidy for building product prototypes and market research, participation in forums and training workshops presented by entrepreneurs, as well as mentorship by professionals.

So far, response from industry, staff and students have been overwhelming supportive. While the first contest saw 22 teams competing in the final round, this year entries have increased significantly, and 24 teams have already been shortlisted.

But winning the contest isn't everything, it's the process that is enriching. "An important lesson in life is learning how to work with others," Dr Lui said. "It's about teamwork, and accepting each other's strengths and weaknesses." This is why the university encourages interdepartmental collaboration in the current contest. "It will be great if engineering school students can work with, say, MBA students with more staff participation," Dr Lui said. "I think the last contest's success has made more students aware of this. Perhaps in the future we may consider giving course credit for participation, so as to attract more students to take part in such a worthwhile exercise."



Mr Young: integration with industries.

燃點創新精神 讓夢想成真

世界上許多最成功的創新產品，最先還不過是一頁草稿上勾劃的概念。然而，就算是最有創意的意念，仍需要適當的培育環境，才可以結出果實纍纍。

「理大萬威科技創業擂台陣」，正是為鼓勵理大學生探索創新與科技的新意念而設。這項活動是理大推行「創新及科技培育計劃」的其中一環，透過比賽為學生提供機會，讓他們匯聚創意，發明新產品，追尋創業夢想。若新產品成功透過培育計劃打入市場，優勝者更可以一嚐成功創業的滋味。

擂台陣獲萬威國際有限公司慷慨贊助，首屆比賽去年在理大企業發展院轄下的企業合作處精心策劃下，取得了令人鼓舞的成績。目前第二屆比賽亦已進行得如火如荼，為培育新一批年青企業家鋪路。

據理大副校長（產學合作及持續教育）呂新榮博士透露，理大舉辦這活動是要為未來知識型經濟培育人才：「我們這新概念，正好配合大學著重學以致用的理念。比賽採用跨學科的模式，有助激發同學的創意，培養他們的商業觸覺。」

鼓勵學以致用 為市場培育人才

呂博士續稱：「我們希望在大學推廣這種學以致用的文化；而比賽成功的原因，正在於揉合了創意和應用，讓工程科學生有機會接觸市場學、會計學及其他商業概念；為他們應付日後創業的挑戰奠下良好的基礎。」

第二屆擂台陣已公開予全日制學生參加，每隊均有一位教員擔任顧問。比賽共分為五個組別，即電器及醫療護理產品、資訊科技應用、個人通訊用具、玩具、及其他項目。比賽分兩輪舉行，初賽已在十月底截止，每組參賽隊伍須提交有關產品的兩頁摘要。成功進入決賽的參賽隊伍則

須在二零零二年一月底完成整份商務計劃書，並交由大學、工業界與贊助機構代表聯合組成的評審團選出優勝者。

每組別的得獎隊伍可獲現金獎二萬五千元，並有機會接受其他資助與津貼，繼續開發改良產品。如獲大學准許，得獎者更可加盟成為大學創新與科技培育計劃的培育小組，透過小組向公眾推銷產品。

此外，工業界的支持對整個比賽亦非常重要，身兼萬威國際有限公司主席兼行政總裁的陳偉文先生不但慷慨捐贈一百萬元贊助首兩屆比賽，而且更積極參與評審團的工作。陳先生說：「我對同學提交的

項目質素留有很好的印象。他們有很具體的意念，產品也非常先進，可見同學們一定為作品付出不少心血。」

陳先生又稱：「比賽本身不但可以令同學增進經驗，更可以培育創意。這些創意並有可能付諸實行，造福社會，締造更多就業機會。比賽有助於為市場培育人才，對香港工業界起著積極作用。」

理大企業合作處總幹事楊孟章先生表示，該比賽參考了麻省理工學院一項計劃的成功經驗。他說：「這比賽把學生、教員和專業人士匯聚在一起。」

各參賽隊伍均獲得大學的大力支持，包括教員提供意見、校園的設施、製作產品原型的補貼及市場研究、舉辦由企業家主講的論壇及培訓課程，以及由專業人士擔任導師。

去年成功進入決賽的隊伍共有二十二支，今年的參賽隊伍有顯著增加，現已有二十四支隊伍進軍決賽。

然而，贏了比賽亦不代表一切，參賽的過程本身已讓同獲益良多。呂新榮博士稱：「我相信去屆創業擂台陣的成功，可讓更多同學領會這種精神。將來我們更可能考慮給予參加同學學分，以吸引更多同學參與這項饒有意義的活動。」

比賽勝出以後……



比利與隊友仍在繼續努力進行產品開發及改良工作。

第二屆擂台陣更受歡迎，與首屆比賽中一個成功故事不無關係。其中一支由機械工程學系學生馮比利為首的參賽隊伍便能一嚐真正創業的滋味。他們的「網絡遙控電子眼」屬低成本高效益的產品，在去屆比賽獲得最高分數，並已跨出科研成果商品化的第一步。

這項利用互聯網閉路電視監察系統，料快將推出市場，每套產品售價預計約四百元。比利說：「當初參加比賽只是為興趣和汲取經驗，並沒有想過會贏出。」比利與同班同學組隊參賽，想鼓勵更多人充分利用互聯網。他說：「我們很慶幸能獲得教授們不少的幫忙和支持。」

「比賽其中最困難的，要數撰寫商務計劃書；我們都是工程系學生，為此我們得要學習會計及商業理論等。」比利認為贏了比賽只是踏出第一步，展望將來還有許多路要走。他深信從參與這創業計劃中所獲取的豐富經驗，將有助他倍添信心迎接未來種種挑戰。「在現今社會中，我們必須保持競爭力，相信我能將參賽學曉的許多原則，應用在未來的工作上。」