

Innovation and Technology Scholarship Award Scheme

創新科技獎學金計劃



Instilling passion and commitment in science and technology

Since the end of the Second World War, 80% of the annual growth of the United State's national economy has relied on innovation and technology. Attracting talents and nurturing them for related industries is, therefore, the key to success of this world power – and today's Hong Kong.

The newly established Innovation and Technology Scholarship Award Scheme was set up to give recognition to high-achieving science undergraduates from local universities and encourage them to pursue science and technology as a lifelong career.

25 outstanding undergraduates from local universities were awarded the scholarship of this pioneering scheme. Each awardee is assigned to renowned scholars who serve as mentors. They take part in the overseas attachment programmes, as well as a local internship

to strengthen their field experience. They also participate in the Service Project Programme to deliver educational science activities for local primary and secondary students to improve the children's interests in science and technology.



增進對科學與科技的熱誠和投入

二次世界大戰以來，美國國民經濟百分之八十的增長一直是來自創新科技。吸納和培育相關的人才，成為這個世界強國的成功關鍵——這一點對今日的香港來說，不無啟示作用。

首屆「創新科技獎學金計劃」於2011年設立，目的為嘉許本港大學的傑出理科本科生，鼓勵他們以科學及科技為終身職業。

25位來自本地大學的傑出本科生獲選為首屆得獎學生。他們每位均獲編配一名相關領域的傑出人士擔任導師，更獲資助到海外作短期研習及安排到本地相關的科技公司擔任實習生，藉以擴闊視野，增進業內經驗。同時，他們會參與創新科技相關的社區活動，為本地中小學生舉辦教育活動，以激發他們對科技的興趣。

"From organising service projects to asking for personal advice, I sincerely appreciate the continuous help and support that I have received from the HKFYG and my assigned mentor, Dr. Michael Mak. The wisdom that they have shared inspired me a lot. Because of the scheme, I have a wonderful chance to study at the University of Pennsylvania (USA) next year, which allows me to widen my international exposure."

Kot Ching-ching, The University of Hong Kong

「從籌備到實行服務項目，至尋求學科以外的建議，青協和我的導師麥海雄醫生都提供持續的協助和支持，其建議也為我帶來很多啟發。這個計劃也給我寶貴的機會，於明年到美國賓夕法尼亞大學上課，擴闊我的國際視野。」

香港大學 葛晶晶

Sponsor	The Hongkong Bank Foundation
Supporting Organisation	Innovation and Technology Commission
贊助機構	滙豐銀行慈善基金
支持機構	創新科技署

Hong Kong Green Mech Contest

香港綠色能源應用創作機關王競賽



Enhancing mechanical and engineering skills

With the advances in technology, the quality of life improves. Environmental protection ensures healthy living. When combined, excitement ensues!

The Green Mech Contest was originally held in Taiwan in 2006, under the joint effort of Taiwan National Science Council, the National Taiwan Normal University, the Taiwan Creativity Development Association and Genius Toy Taiwan Co. Ltd. This is an educational programme which aims at enhancing knowledge of young people and their application of physics, energy exchange and green energy concepts in mechanism designs and technology. It was then introduced to Hong Kong by the HKFYG in 2010.

More than 60 students from 13 primary and secondary schools, as well as education centres, participated in the Pilot competition. The winning teams from the

senior primary and junior secondary divisions went on to represent Hong Kong in the Finals held in Taiwan in July 2011, with excellent results. POH Chan Kai Memorial College won the championships again, beating 57 teams in the junior secondary division, while Tai Po Old Market Public School - Plover Cove received the Innovative Application of Science Special Award.



提升機械工程設計能力

科技進步能改善生活質素，保護環境帶來健康生活。當兩者結合，原來還可以有無限樂趣！

綠色能源應用創作機關王競賽源自台灣，在2006年由台灣行政院國家科學委員會、國立台灣師範大學、中華創意發展協會及智高實業股份有限公司攜手創辦，青協於2010年引入香港並首辦。是項教育活動旨在培養青少年對物理、能量轉換和再生能源的認識與應用，以及提高他們對機械設計的興趣。

首屆賽事共吸引了逾60名來自13間中、小學及教育中心的學生參與。初中組和高小組的冠軍隊伍於2011年7月代表香港前往台灣參與總決賽。其中，博愛醫院陳楷紀念中學的隊伍憑著極為創新的機關作品，擊敗了芸芸57支隊伍，勇奪初中組別冠軍寶座；大埔舊墟公立學校（寶湖道）隊伍亦在賽事中獲得佳績，在小學組別榮獲科學應用創新獎特優獎項。

"I am so glad to win the championships in Taiwan's Green Mech Final, to bring honour both to my school and to Hong Kong. Through this Contest, I learnt about the principles and applications of science. I must say that the trip inspired my creativity on the application of science and mechanisms."

Yu Sze-wai, POH Chan Kai Memorial College

「很高興於台灣比賽勝出，為學校及香港爭光。這個比賽讓我學習及接觸到不同的科學原理並加深應用。透過參加海外比賽，觀摩其他隊伍的設計，亦啟發了我在科學及機械設計應用上的創意。」

博愛醫院陳楷紀念中學 余施蕙



Supporting Organisations

Babyboom Learning Co., Ltd., Genius Toy Taiwan Co., Ltd.

Major Sponsor

Innovation and Technology Commission

Venue Sponsor

Hong Kong Science and Technology Park Corporation

支持機構

Babyboom Learning Co. Ltd.、智高實業股份有限公司

主要贊助

創新科技署

場地贊助

香港科技園公司

Hong Kong FLL Robotics Tournament

香港FLL創意機械人大賽



Enhancing technological skills

Robots grab the imagination of most young people, especially those still in schools.

The FIRST Lego League (FLL) is a well-known international programme from the United States, which was introduced to Hong Kong by the HKFYG in 2005. The aim is to improve young people's creativity through play and problem solving using robotics. Since its inception, more than 2,500 students from 179 schools and youth centres have participated.

This year, the Champion Team of the Senior Primary Division was sponsored to join the World Festival in America, while another winning team from the Junior Secondary Division joined the FLL Open European Championship in the Netherlands. The Team from Carmel Secondary School made us all proud by winning the first established Junior Jury Award with their creativity.



提升科技應用能力

一提起機械人，年青人便會自然產生無限想像，仍然在學的尤其感到興奮莫名。

香港FLL創意機械人大賽源自美國的FIRST Lego League (FLL)，由青協於2005年引入香港。學生可從中輕鬆地體會及探索科學與科技的樂趣。推行至今，賽事已吸引超過2,500名來自179間中小學及青年中心的學生參與。

今年，高小組得獎隊伍參與了美國FLL世界賽；初中組得獎隊伍則前往荷蘭參加FLL歐洲公開賽，迦密中學的同學最終以無限創意，勇奪首設的青少年評審大獎。



創意 機械人大賽



"What an unforgettable experience for our team! Both in Hong Kong and in the Netherlands we learnt a lot, especially about teamwork and getting on with others. But in the end, we were all valuable pieces of a puzzle with our individual talents. By cooperating well, everything worked out and we were able to form a nice picture!"

Kwok Hiu-lam, Carmel Secondary School

「參加FLL給我們難忘的經驗，無論是在香港還是荷蘭都獲益良多。我們在比賽裡學懂怎樣互補長短，就好像拼圖一樣，成功運用各人的優點去合作完成每項挑戰，最後拼砌出一幅美麗的圖畫。」

迦密中學 郭曉琳

Supporting Organisations

Semia Ltd., Department of Computing, The Hong Kong Polytechnic University

Major Sponsor

Innovation and Technology Commission

支持機構

西覓亞有限公司、香港理工大學電子計算學系

主要贊助

創新科技署

Hong Kong Odyssey of the Mind Programme

香港創意思維活動



Developing problem solving skills

To build a vehicle that performs tasks and displays human emotions. To put on stage a team of scientists that uncovers the cause of mysterious events. To create a wood-and-glue structure that holds more than 1,000 pounds. Impossible? Not to some primary and secondary school students!

Started in the USA and jointly introduced to Hong Kong by the HKFYG and the Education Bureau in 1995, the Hong Kong Odyssey of the Mind Programme is a territory-wide annual event which nurtures young people's creativity by encouraging them to think out of the box to solve different kind of challenges in a positive way.

Around 10,000 students have participated in the Programme so far. The long-term and spontaneous problems of the Programme help participants broaden their thinking, and provide them with the confidence to tackle issues positively and creatively, without the fear or pressure of being "right" or "wrong".

In 2011 alone, there were a total of 87 teams. Six local teams attended the World Finals in USA to compete with other top finishers from 34 American states and 12 other countries. POH Chan Kai Memorial College won the Third Place in the classical problem "Le Tour Guide" Division II against 63 other teams, while PLK Grandmont Primary School placing fourth in the classical problem Division I against 62 teams at OM World Finals.



培養解難能力

製作一輛能執行特別任務和表現人類情感的小車。在舞台上扮演科學家揭開一連串神秘事件的原因。搭建一個只用木料和膠水的結構，負荷一千磅的重物。可能嗎？中小學生都做到了！

香港青年協會與教育局攜手合作，於1995年將源自美國的創意思維活動引進香港。活動鼓勵學生以多角度思考和正面態度面對種種不同的考驗，培養學生受用的創新思維。

活動發展至今，已成一項極具規模的學界盛事，歷年共有約10,000名學生曾參與其中。由於题目的解題方法並無限制，參賽者都學會了從多角度思考，變得勇於表達意見。

活動的本地賽於2011年共有87支中、小學生隊伍參與。六支冠軍隊伍獲贊助代表香港遠赴美國參加世界賽，與來自美國34個州和12個國家的頂尖隊伍一較高下。博愛醫院陳楷紀念中學在經典題「經典導遊」第二組別共64隊國際參賽隊伍中，勇奪季軍；而保良局錦泰小學亦於同一題目第一組別63隊中名列第四。



"OMP has broadened our thinking pattern as well as our horizons! In the World Finals, we learnt that every tiny or simple thing can be transformed into something new and different, simply by thinking creatively. We saw the Champion Team using a single box as the backdrop for different scenes, which we'd never thought of!"

Victoria Chan, Marymount Secondary School

「OMP擴闊了我們的思考模式，讓我們大開眼界。在世界賽中，我們學到只要巧妙地運用創意，便能將每樣簡單細小的物件變成與別不同的新穎事物。我們十分欣賞冠軍隊伍只利用一個箱便能造出不同的場景，這是我們未曾想過的！」

瑪利曼中學 陳凱婷



Co-organiser	Education Bureau
Principal Sponsor	Quality Education Fund
Supporting Organisation	The Hong Kong Institute of Education
合辦機構	教育局
主要贊助	優質教育基金
支持機構	香港教育學院

LEAD Creative Class

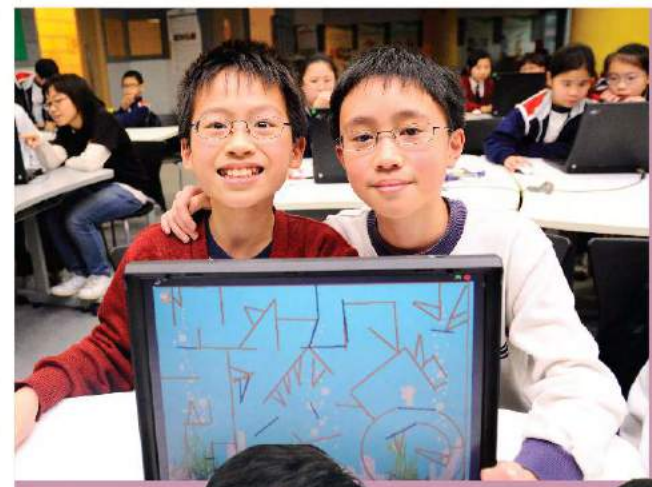
LEAD創意科藝教室



Initiating inspirational learning

Education is meant to inspire creativity and increase motivation. In this sense, the Learning through Engineering, Art and Design (LEAD) Creative Class is the key.

The LEAD Creative Class was set up in 2008 as a three-year programme offering students a creative way of learning. Working through the curriculum, this programme supports teachers to be innovative by using integrated digital technology.



In 2010-11, LEAD Creative Class has sought the support from the Education Bureau and organised free Scratch Multimedia Workshops for 115 schools to promote the use of Scratch, a multimedia programming software developed by the Massachusetts Institute of Technology Media Laboratory. The Education Bureau also supported the "Scratch Day Hong Kong 2011 cum Setting a New Guinness World Records" that took place at The Hong Kong Convention and Exhibition Centre. The event set a record for "The Largest Digital Game Design Lesson", which also became the first large-scale digital game design activity in Hong Kong.

With Apple Asia Ltd. as a supporter, the LEAD Creative Class has invited international and local schools to collaborate in the "Scratch Challenge-based Learning Pilot Programme" to help establish a more creative joint-school learning and teaching culture. Dr. Felicia Tsang, the Education Consultant to the programme, provides an insider's view of how innovative changes take place in schools through the third publication of the programme.



啟動創新學習

教育旨在啟發思維和提升學習動機。如此說來，「LEAD創意科藝教室」正是教育成敗的關鍵。

LEAD創意科藝工程計劃於2008年推行這項為期三年的學校教育項目，與教師在課程上協作，融入創意和數碼科技，進行創新的教與學策略，裨益學生。

承蒙教育局支持，教室於2010/11學年舉辦「多媒體軟件Scratch學習活動」，向115間學校推廣由麻省理工學院媒體實驗室所開發的Scratch教育軟件，並於

香港會議展覽中心舉行「Scratch Day Hong Kong 2011暨刷新健力士世界紀錄」，締造首個「最多人參與數碼遊戲設計活動」的健力士世界紀錄，同時亦是本港首個大型數碼遊戲創作活動。

教室亦獲得Apple亞洲有限公司支持，於2010/11學年邀請國際小學及本地小學合作，進行「Scratch挑戰為本學習先導計劃」，運用科技進行跨校的創意學習。本項目另邀得資深教育工作者曾秀芬博士擔任項目教育顧問，撰寫關於學校教學蛻變之第三本項目叢書。

"The programme made me shift my teaching style from being a teacher who teaches the whole class the same lesson, to having an investigation based unit of study. Now my role is really as a coach, just trying to ask questions."

Ms. Sarah McLean, Year 5 Homeroom Teacher,
Chinese International School

「以前我視自己為向全班學生教授的老師，現在則是進行一個探究式的學習單元。我的角色變為一個教練，嘗試向學生提出不同的問題。」

漢基國際學校五年級班主任
Ms. Sarah McLean

Sponsor	The Hung Hing Ying and Leung Hau Ling Charitable Foundation
Supporting Organisations	Education Bureau, Apple Asia Ltd.
贊助	孔慶熒及梁巧玲慈善基金
支持機構	教育局、Apple亞洲有限公司



LEAD@Cyberport Creative Summer Programmes

LEAD@數碼港創意暑期活動



Inspiring creative ideas in families

Playing the violin or learning how to swim or cook or even Japanese – these are some of the common ways children spend their summer holidays. LEAD offers something totally different...

“Family DIY with LEAD@Cyberport” was a design activity for families to build and decorate miniature shoes and “My Chair”, the cardboard DIY chair produced by MUJI.

“Family Orienteering with LEAD@Cyberport” was an exciting orienteering activity for family teams to utilise smart devices, such as the iPod Touch or smart phone to search for hidden QR codes placed at different locations of Cyberport. Each code carried a hint guiding the teams to a specific game booth full of challenging games and puzzles for the whole family to resolve.



啟發親子創意

小提琴班 / 游泳班 / 烹飪班 / 日文班——香港青少年的暑假活動通常離不開以上種種，但青協LEAD創意科藝工程卻編排了與別不同的創意活動……

「LEAD數碼港·創意親子設計日」提供多場親子設計活動，由家庭成員共同著手，製作及點綴布質小鞋子及由無印良品所生產的My Chair紙椅。

「LEAD數碼港·親子創意定向日」則是一項刺激的數碼定向活動。各參與家庭須組隊走遍數碼港的不同位置，找尋數碼標籤，並使用智能電話或數碼裝置作出解碼，讀取出內藏的提示信息，以到達指定之遊戲點，接受各種挑戰遊戲及謎題的考驗。



“The programme has enabled me to experience the importance of unity among family members!”

Leung Chin-hei, Participant

「這活動讓我體會到凝聚家庭成員的重要性！」

活動參加者 梁展熙

Sponsor	Chan Dang Social Services Foundation
Venue Sponsor	The Hong Kong Cyberport Management Company Ltd.
Equipment Support	Apple Asia Ltd.
Collaborator	IBM Volunteering Club
活動贊助	陳登社會服務基金會
場地贊助	香港數碼港管理有限公司
器材支持	Apple亞洲有限公司
協作參與	國際商業機器中國香港有限公司企業義工隊