

Youth HONG KONG



LEADs Creativity
the way



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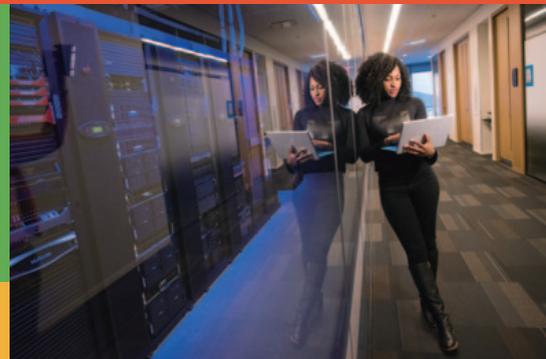
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The 21st century classroom is evolving and today’s students need a blend of knowledge, tools and technology that is useful for real-life applications. Indeed, I have heard it said that this kind of education is not just about the “Three Rs” of “reading, ’riting” and ’rithmetic”, but also about the “Three Cs”: creativity, communication and collaboration.

LEAD (Learning through Engineering Art and Design) is all about this kind of learning and the Federation is deeply committed to reaching all students, irrespective of their socio-economic status, to ensure they have access to it. This issue of *Youth Hong Kong* sets the background against which LEAD developed with interviews about the new core competencies and skills that teachers and students need.

While learning how to learn, we in Hong Kong are on a journey. We imagine that you too have your own experiences and stories to share. Let us know what you think about how and why new technologies, science, experimentation and practical application need to be part of education.

Allow us to take this opportunity to wish you all a very Merry Christmas and Happy New Year! We look forward to your continued support in 2017.

Dr Rosanna Wong, DBE, JP,
Executive Director, HKFYG



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The Hong Kong Federation of Youth Groups was founded in 1960 and is the city’s largest non-profit youth organization. Its programmes and activities at over 60 locations have annual attendance of 5 million.

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Come Create, Go



LEAD stands for Learning through Engineering, Art and Design, a unique creative education programme for young people that instills a new way of learning. Free of “right” ways and “wrong” answers, it offers an opportunity for hands-on, experimental discovery, with imagination, innovation and creativity.

It is said that some of the jobs that today’s students will enjoy in the future have not yet been invented. While this may be true, what is clear is that a traditional school curriculum is not enough to prepare them for the future. Instead, it is increasingly obvious that in order to be competitive young people need to be adaptable, have a strong interdisciplinary foundation with practical hands-on experience of relevant skills as well as critical, logical thinking for problem-solving. Integrated study is the key.

An interdisciplinary, integrated approach to learning involves questioning and challenging, making connections, exploring ideas, keeping an open mind and reflecting critically on plans, actions and outcomes.

As Britain’s Ofsted* put it, “Pupils as creative learners ... become independent enquirers, creative thinkers, reflective learners, team workers, self-managers and effective participants.”¹ Such pupils are less inhibited and more confident, much better prepared for the world of tomorrow.

“*LEAD’s pioneering, design-based activities emphasize the integrative use of science, technology, coding and robotics, as well as art and design.*”



LEAD education supports and encourages this and more. Since 2005, HKFYG has spearheaded LEAD in collaboration with the MIT Media Lab at various venues including schools and youth centres. LEAD’s pioneering, design-based activities emphasize the integrative use of science, technology, coding and robotics, as well as art and design. This approach is similar to that used in STEM education (Science, Technology Engineering and Mathematics) or STEAM (with Art added), that is now being widely promoted.

In collaboration with primary and secondary schools, plus other stakeholder partners throughout the city, LEAD also provides students with opportunities to take part in competitions in Hong Kong and overseas, thus offering the chance of exchange and exposure to a wider world.

* Office for Standards in Education, Children’s Services and Skills

“ *LEAD labs are platforms for hands-on, interactive learning that express the mission of linking knowledge with practical application.* ”

This approach to learning not only involves generic skills, such as decision-making, teamwork, critical thinking and effective communication, it also provides learners with motivation, guided by interest and curiosity rather than driven by external factors such as tests and exams and the fear of failure. LEAD is an example of this kind of learner-centred platform. It also introduces students to possible career paths in science, technology and engineering and encourages more young people, especially girls, to become coders, software engineers, technologists and technicians in their future careers.



What the LEAD labs do

HKFYG has six LEAD labs in the community, with state-of-the-art facilities to enable experimentation and discovery with a mix of media and disciplines. Headquartered in the HKFYG Building in North Point, with satellite labs in Federation Youth SPOTs around the city, these platforms for interactive learning express LEAD's mission of linking knowledge with practical application.

Today's students need encouragement to acquire relevant skills for the workplace. They also need to think innovatively and apply what they know practically. The LEAD labs provide the right kind of learning environment for them to achieve both of these goals.

LEAD's hands-on learning approach makes this type of education more relevant – and more fun. Encouraging the practical application of theoretical knowledge can mean that students become more innovative and experimental. The end products of project-based learning are then not simply a means to an end. Whether in the form of music and animation, computer-designed games, coding and software development or technology and robots, they are also the tools with which to test real world applications.

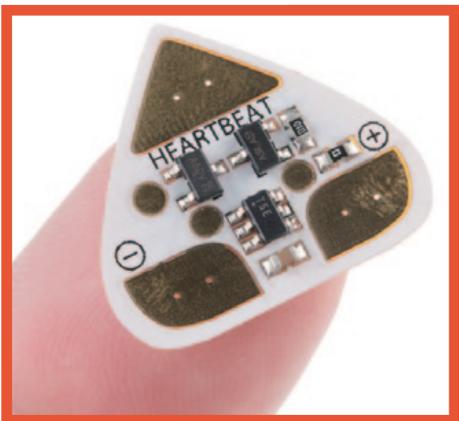
香港青年協會於早於2005年與美國麻省理工學院媒體實驗室合作，成立LEAD創意科藝教室（Learning through Engineering, Art and Design）。顧名思義，LEAD創意科藝教室是透過創意、程式、藝術及設計等元素來提升學習成效。LEAD強調讓學生自己動手探索，並求取相應答案，以實驗來發揮創意及創新。這個信念，與特區政府近年積極推動的STEM教育（Science, Technology, Engineering, Art and Design）不謀而合。LEAD強調學生透過「動手去做」來提升創意思維，並應用於日常生活；學生亦因此提升撰寫電腦程式的技能，對他們將來工作大有幫助。為了進一步推廣LEAD，香港青年協會現設有六個LEAD實驗室（LEAD Labs），希望為各區學生舉辦更多提升創意的活動。



Inventive learning

Michael Smith-Welch, educator and artist with the MIT Media Lab, collaborated with the Federation to set up LEAD. In this article he writes about creative thinking, playful learning and designing environments that support learning through invention.

For creative learning to take place, first you need materials to explore. There should be a wide variety and the learning environment can include anything from the resources needed to build inventive model cities out of low-tech masking tape to those needed for making interesting circuit designs from high-tech, conductive materials. For a teacher who wants a creative approach in the classroom such a materially-rich learning space is essential.



Exploring learning: innovative environments

Tapigami* art forms and Chibitronics** circuit stickers are examples of materials you will find in a creative learning environment.

Tapigami was created by Sacramento artist Danny Scheible. He uses masking tape to create large-scale installations and create an accessible and interactive art form designed to engage and educate artists of all ages. More information at tapigami.com/

Chibitronics grew out of Jie Qi's passion for technology and art. She went to Columbia University to study mechanical engineering and on to littleBits and High-Low Tech at MIT Media Lab.

Lesson plans and project templates at chibitronics.com/

As an artist, I take an educator's approach and as an educator I take an artist's approach to creative learning. I love combining electronics – analogue or digital – with the physical world. After going to art school my interest in robotics and computer programming grew so I always looked at a robot or a computer programme from an aesthetic and conceptual perspective.

More importantly, I looked at robotics and programming from the perspective of personal expression. This is what led me to MIT, the Media Lab, and the Lifelong Kindergarten group. Some of my favourite examples of learning through invention help people be better designers, artists, makers. Good examples are Scratch and Arduino programming software.

Scratch

Scratch helps young people learn to think creatively, reason systematically, and work collaboratively — essential skills for life in the 21st century. With Scratch, you can programme your own interactive stories, games and animations, then share your creations with others in the online community. Scratch is designed especially for 8-16 year-olds but is used by people of all ages. Millions of people are creating Scratch projects in a wide variety of settings, including homes, schools, museums, libraries, and community centres. It is a project of the Lifelong Kindergarten Group at the MIT Media Lab and is free of charge.

More information scratch.mit.edu/



Supporting learning: creative flow

Schools should provide learners and teachers with more time to explore and play, particularly to play with things that interest the learner personally. It's really hard, but ultimately the teacher needs to really have an understanding of the individuals they are working with. It's no small task.

While HKFYG is setting up LEAD labs, Tsinghua University also wants to support and cultivate students who can innovate and think outside the box. While recognizing that they are very good at supporting a certain kind of student who knows how to “take the tests” and “play the game” they support creative thinkers.

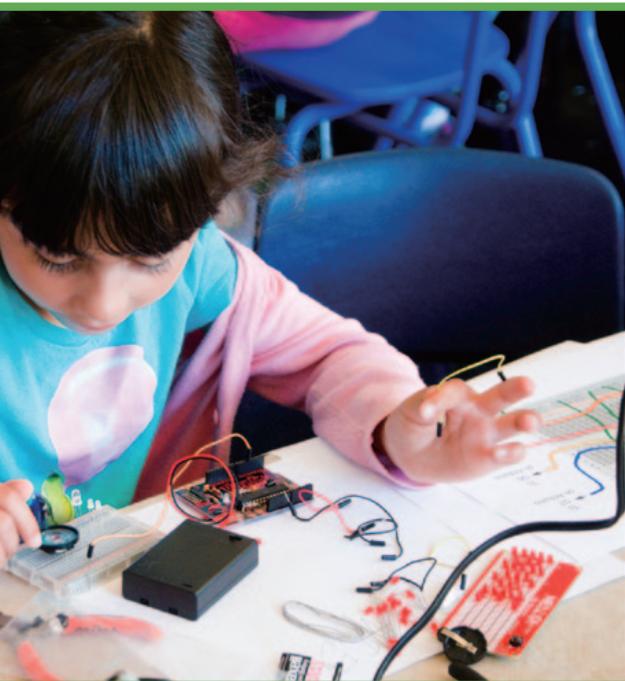
However, it's very hard to teach “creative problem-solving” without giving learners some concrete things to work on and I really believe in “priming the pump.” I

美國麻省理工學院媒體實驗室的教職及藝術家 Michael Smith-Welch 曾與本會共同設立賽馬會創意科藝中心 (LEAD)。今期，Michael 特別與讀者分享創意思維、趣味學習，以及如何營造一個以創意發明為學習基礎的環境。Michael 認為，要發展創意思維，首要條件是備有足夠工具，讓學生及老師按自己的設想，製作相關物件。這些工具包括 Scratch、Arduino 等，學生可透過應用電腦程式等軟件，學習怎樣將創意化成現實。這些經驗對學生將來持續發展創意，有莫大裨益。

mean, when you dig a new water well and install a pump of some kind, you need to force water into the pump to create enough initial pressure to make it work. The same applies to being a teacher so I always try to share rich examples and ideas to start the creative “flow.”

I usually start with a simple, contained experience to get things “flowing.” To quote Seymour Papert, the father of constructionism and creative learning, “You can't think about thinking without thinking about thinking about something else.” What he means is, you can't really learn what it means to be “creative” without learning about very specific aspects of the world, such as politics, light, motion and chemistry. I believe firmly that all learning is best done by making.

Most of what goes on in the Lifelong Kindergarten group these days is focused on Scratch. I'm looking forward to seeing what happens with Scratch v. 3.0 but that's still a little way off. Right now I'm really interested in the ScratchX initiative because I think it is a great sand box for making things, for exploring the possibility of connecting a digital computer to the physical world. With its “experimental extensions”, you can create Scratch projects that connect to external hardware, such as electronic devices and robotics, and online resources, including web data and web services.



Arduino

Arduino is an open-source electronics platform based on easy-to-use hardware and software. It's intended for anyone making interactive projects and is aimed at students without a background in electronics and programming, empowering users to build them independently and adapt them to their particular needs. The least expensive version can be assembled by hand and pre-assembled Arduino modules cost less than HK\$400.

More information arduino.cc/



Michael Smith-Welch,
MIT Media Lab



Digital, disruptive and innovative

Lim Cher Ping, the Chair Professor of Learning Technologies and Innovation at the Education University of Hong Kong, is convinced by the potential of digital technologies for building teacher capacity and enhancing the quality of teaching and learning.

Digital technologies can give a boost to the way people teach and learn but how many busy teachers have been converted and are they eager for change? There's a certain reluctance, says Professor Lim. "Not all teachers are engaged. Some use digital technology only because they must. The big question is how to establish buy in at the grassroots level." To convince the sceptics, the only way is to show why and how multimedia digital technologies can improve learning outcomes.

Why: scepticism to belief

Although there has been massive investment by many governments in infrastructure for digital learning in schools, "not only teachers and school leaders but parents have to see for themselves that it can enhance their work and students' learning outcomes." Professor Lim, whose work has taken him from Singapore to Britain and from other countries in Southeast Asia to Australia, talks about documenting promising practices and lessons learnt. "Support from school leaders is crucial. Digital technologies have the power to transform teaching and learning but they also introduce disruptive practices. Their value becomes obvious through constant evaluation and reflection."

School leaders are vital but "individual teachers can champion innovation and serve as mentors to those who are less experienced. Together with the teachers, school leaders have to see beyond infrastructure, hardware and digital resources, and adopt a holistic approach to support digital technology." But these leaders have significant hurdles to overcome. The first is getting the message across. Today, with so many new initiatives and demands placed on teachers' time, there is a risk that they become immune to novelty, Professor Lim says with a smile. "Education is sometimes like a fashion industry but when it comes to digital technologies, there needs to be justification for change."





Where : from here to the moon

Like everyone else, teachers only have 24 hours in their day, “so they need to know why they should change, how they are supposed to be dealing with change and they need resources to help them use the new technologies effectively.” This includes helping them to find or create suitable resources. “The tough part for Hong Kong teachers is that most available digital resources are in English.” To find or create materials in Cantonese means more work at the local level. “The resources are out there but need to be localized for use by the teachers.” The Education Bureau has taken steps in this direction but he strongly suggests that “school teachers should contribute as well. They have such rich pedagogical experience.”

However, don't worry, he says. This doesn't mean digitizing all teaching materials overnight. “Let's start with lessons that are difficult to teach in the traditional classroom.” He came up with the perfect example for a few days before the supermoon was clearly visible in Hong Kong. “Go for something that suits the medium, like teaching about the phases of the moon in primary school.

Instead of using a basketball, a tennis ball and torchlight, use digital technology. What a great support for visualization and animation!”

What: for intelligent life

Professor Lim is convinced that digital technologies should also provide opportunities for students to monitor and assess their own progress. “There is too much monitoring by teachers. Digital technologies support self-monitoring, managing one's own learning and learning outcomes and planning a learning trajectory.” In this way, assessment becomes part of the learning process, with feedback and scaffolding provided by teachers and mediated by digital technologies at each stage. Intelligent diagnostic opportunities are built in and they empower students by diagnosing their learning needs and steering them towards suitable learning paths.

But digital diagnostic tools, although they enable teachers and learners to do a better job, still have their limitations, he warns. “Don't forget that they are all based on a set of inbuilt assumptions, and those who sell the tools to educators should be upfront about them. Digital diagnostics cannot replace teachers. It is still very important to have a human interface, not only because of cognitive function but for the holistic development of our students.”

“ Teachers need to know why they should change, how they are supposed to be dealing with change and they need resources to help them use new technologies effectively. ”



Although parents want to see evidence of the beneficial effect of digital technologies on learning outcomes and one indicator may be the DSE results, there are other valid indicators. These include problem-solving, critical and creative thinking, effective communication and social interaction. Professor Lim, with The Education University's assessment development research centre, has devised a self-assessment questionnaire which measures these as well as ethical decision-making and global perspective.¹ "They are competencies valued by the work force today. They are about learning how to learn and sustainable learning for life."

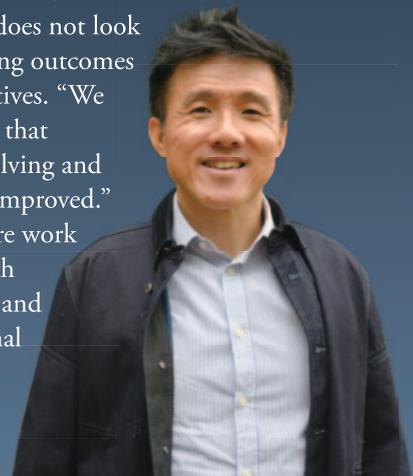
Where and when: non-stop, no boundaries

Professor Lim's sincere hope is that Hong Kong's Education Bureau is also working on a rethink of the form of assessment used in schools. "Digital technologies enable the embedding of continuous assessment. They can transform the way assessment is done." He tells us about an Italian course with digital assessment in a project that he led in Western Australia. It had both summative and formative assessment with teacher and peer feedback

"The tough part for Hong Kong teachers is that most available digital resources are in English. They need to be localized for use by the teachers."

built into a six-month learning process involving a series of tasks and a scenario that included video recordings to explain everyday life in Perth to friends in Italy. Technology meant that students could create a digital portfolio of their work. "Both the tasks and the assessment involved multi-literacies, not only from a traditional perspective but with the added element of digital literacy."

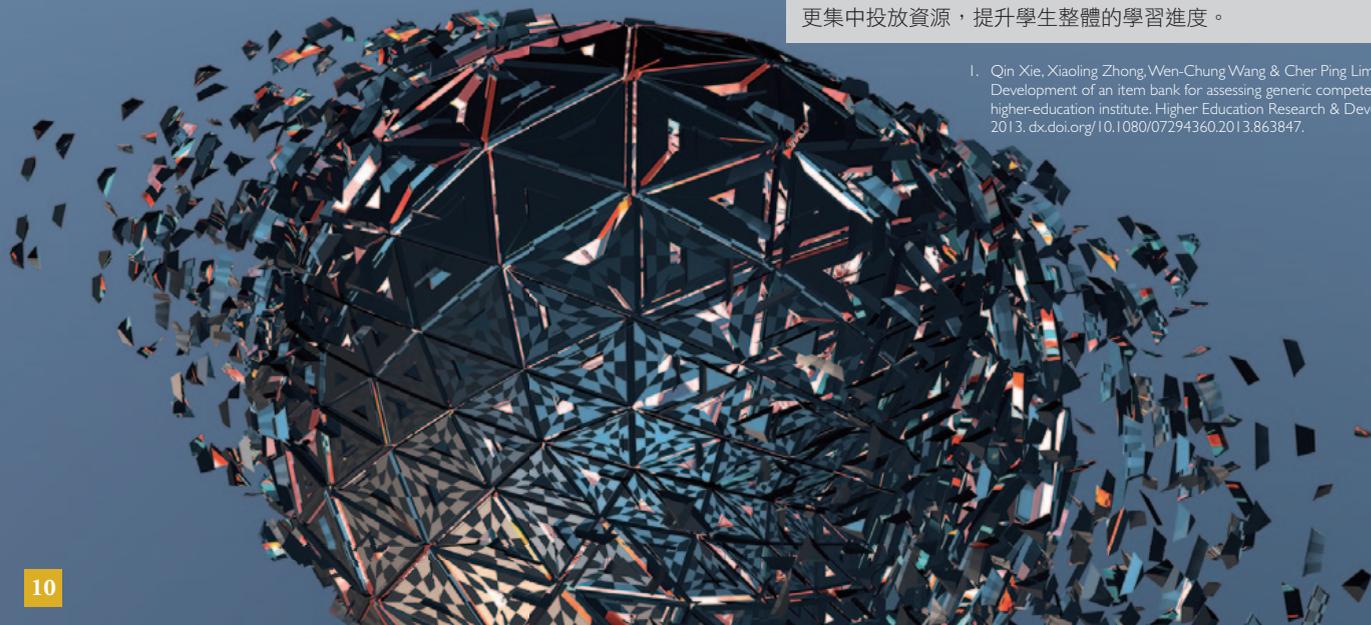
Digital technology has been used by Hong Kong schools for the last 20 years and it is only natural to say, "show me the data, show me the evidence." Even if the evidence does not look like traditional learning outcomes there are new alternatives. "We must be able to show that creativity, problem solving and critical thinking has improved." For that, he says, more work needs to be done, with ongoing quantitative and qualitative longitudinal studies taking place across Hong Kong and Asia. ■



**Professor Lim Cher Ping,
Education University of Hong Kong**

香港教育大學課程與教學系首席教授林質彬認為，靈活運用多媒體科技，有助大大提升教學及學習成效。但要在繁重的教學工作日程中，再抽時間學習新科技，對部分教師而言，十分困難。要說服這些抱有疑惑的教師，最有效方法是讓他們親自了解當中的好處。林教授強調，運用多媒體科技於教學，重點是讓學生更有效評估自己的學習進度，從而作出調整，並非由教師從上而下進行監察。這種學習模式，不僅為學生帶來更多好處，亦能讓教師更集中投放資源，提升學生整體的學習進度。

1. Qin Xie, Xiaoling Zhong, Wen-Chung Wang & Cher Ping Lim. Development of an item bank for assessing generic competences in a higher-education institute. Higher Education Research & Development, 2013. dx.doi.org/10.1080/07294360.2013.863847.





Promoting STEM

The Education Bureau (EDB) is giving emphasis to the promotion of STEM (science, technology, engineering and mathematics.) EDB's Deputy Secretary, Dr Catherine KK Chan, and Senior Curriculum Development Officer for Science, Mr Willy Choi explain how they are building on international and mainland experience.



The EDB's goals are to cultivate innovative, creative thinking in young people while strengthening their capacity to integrate what they learn in order to solve real-world problems. "We don't want to lose the traditional approach to STEM subjects within the traditional curriculum," says Dr Chan, "but we do want it to have complementary, practical applications."

How will this policy be put into effect? The EDB is aiming to parallel a worldwide trend of giving students job skills

that will equip them for an era of rapid economic, scientific and technological change while strengthening their ability to apply those skills. To this end, six strategies are proposed. These include renewing and enriching curricula and learning activities in science, technology and mathematics, providing useful learning and teaching resources, enhancing teacher training, strengthening partnerships in STEM sectors of the community, and sharing best practice. One-off funding for STEM activities at primary level has already begun and it is proposed to extend it in due course.

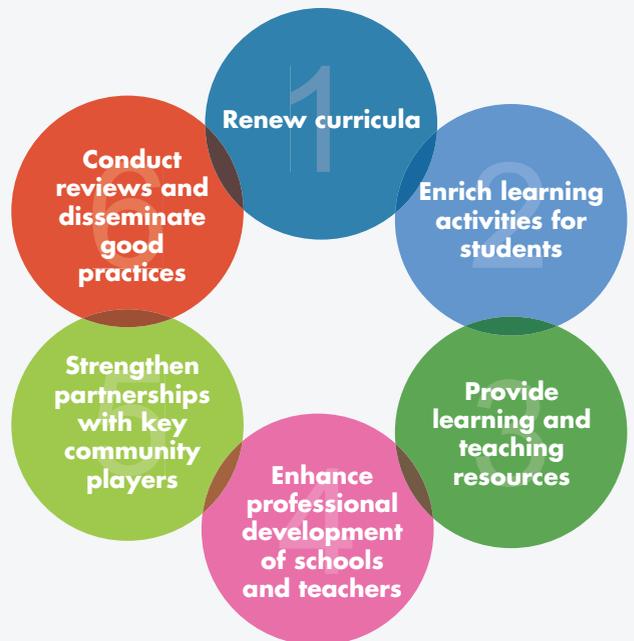


Major updates in the secondary school science curriculum include introducing students to the connections between various science disciplines and updating the syllabus to keep up with change. Within the technology curriculum, more time is to be allocated to programming and coding. In mathematics, there will be increased emphasis on project and problem-based learning, as well as mathematical modelling, data handling and probability theory.

Mr Choi, whose work takes him to the frontline of curriculum and professional teacher development, elaborates. “All the elements of STEM can be found in the Key Learning Areas of science, technology and mathematics education.” Problem-solving and innovative thinking are central, as is collaboration between teachers,” he goes on.

“Professional development for teachers is already under way,” Mr Choi continues. “Cross-curricular workshops and symposia are being held by self-selected STEM teachers from leading schools to provide direction for in-service training.”

Six Strategies for Promoting STEM Education



Source edb.gov.hk/attachment/en/curriculum-development/renewal/STEM%20ppt%20_eng_20151105.pdf



Dr Catherine KK Chan, Mr Willy Choi
Education Bureau HKSAR

“Although there is great diversity in Hong Kong’s schools, its teachers and principals,” Dr Chan continues, “there are common guiding principles.” These include learner-centred approaches, learning experiences and opportunities beyond the classroom, a balance between considerations of students’ interests and needs, teachers’ views and partnerships with key community stakeholders.

Recognizing that the acronym for STEM is not widely recognized in Hong Kong, Dr Chan explains that it is a convenient label, reflecting a combination of innovation and creativity and mirrored in today’s “maker culture” where inventors and innovators get together to design and build while learning from each other. “In Chinese, we call them *chong ha* (創客), or creative, innovative people.”

“Our working definition of creativity in this context – established after much debate – is the expression of original ideas used or applied in an original way,” concludes Dr Chan. “This brings together the concepts represented by *chong yee* (創意) for creativity and *chong san* (創新) for

innovation and is not playful creativity or the expression of the lively imagination purely for its own sake.”

Promotion of STEM is to be a continuous, dynamic process and the outcomes of STEM education will be assessed, says Dr Chan, stressing that this does not mean they will be measured. This will, Dr Chan assures, “allow space for divergent answers,” with tolerance of ambiguity and acceptance that there is not always a “right answer.” ■

香港特別行政區教育局副秘書長陳嘉琪博士及高級課程發展主任（科學）蔡捷佳先生表示，教育局十分重視本地 STEM 的發展，並會借鏡其他地區的成功經驗。提到 STEM 的中文意思，陳博士認為「創客」一詞較能反映 STEM 所提出的創意及創新思維。陳博士認為，要提升學生創意之餘，亦要讓學生整合所學習的技能，以應用解決現實生活中的問題。蔡主任則表示，現正積極透過培訓，提升教師在各科應用 STEM 教學的能力，務求令 STEM 融合在主流科目內。蔡主任相信，學校透過了解他校的成功經驗，能協助他們設計自己適用的 STEM 教學模式。

Creative Sparks

Baptist Rainbow is a government-aided primary school with a difference. Its pupils have a sparkle in their eyes and its workshops are full of donated hi-tech hardware. Principal, Mr Chu Tsz-wing, says children here combine education with the needs of the community but not so long ago the schools was threatened with closure.

What makes the Baptist Rainbow Primary School different? Fundamentally, it's mindset. "Parents come here because they want their children to learn good communication and core skills, not because we push them to get good academic results," Principal Chu explains. "They also see how their own education did not provide them with the skills they need and they want something different for their own children."

He goes on to say that it hasn't always been like this. From 2003 to 2013, the school went into steep decline. 27 classes became six and 65 teachers dropped to 14. When Mr Chu was hired the school was under threat of closure. "In Hong Kong, a 'good school' needs to have good results, especially in English. It should also have successful alumni and a beautiful campus. We had none of these."

There was nothing to lose. Mr Chu – not the kind of person to give up easily – set out to transform the situation. He succeeded. In the past three years the school has come back to life with a shower of sparks, ignited by an alternative vision of education that is shared by teachers and parents alike.

The teachers all have a shared attitude and commitment. "When you want change and progress first you have to ask an essential question. 'Why?' Start with 'why' and the rest follows," says Principal Chu.

They asked, "Why am I teacher? Why do we teach as we do? Why do we teach what we teach?" In response, they adopted creative approaches to learning. "Like the parents, they chose Rainbow because they wanted something different. They wanted to embrace change instead of becoming tired and stale after teaching the same old things for 20 years or more."

From 14 teachers the school's staff has grown to 38. The six classes have increased to 16 and this year there are 400 students. They live in various parts of the city and come from diverse ethnic and cultural backgrounds. "What the parents share is their age group – most of them are in their middle 30s – and a belief that what the education system of Hong Kong has been offering is not what they want," says Mr Chu. This gave him a clean slate to write upon.





The first step was to arrange the timetable so that normal lessons take place in the mornings and the afternoons are reserved for project work. The project initiative, called DreamStarter, thrives through partnerships. “We use crowdfunding and crowdsourcing to raise support and at present we have 200 partners in the industry and education sectors supporting 28 student projects.”

Support comes in kind, not in cash, and all the projects are about practical problem-solving. One is building an electronic car. “Teachers couldn’t provide everything so we went to the Hong Kong Polytechnic University’s engineering department for help. They provided a free chassis. Then a 3-D printer company helped create modules for the interior and HKT provided a charger for the car battery.” Going one step further, the school is also organizing a pitching day with Hong Kong Cyberport so that pupils can practise presenting their ideas to an audience.

The school doesn’t teach STEM as such, says Principal Chu, although all of its elements are involved in project work. “We don’t teach ICT either, or e-learning, but like STEM they are an integral part of both teaching and learning.” Every child has a small tablet computer. They cost about HK\$900. Disadvantaged students – about 30% of the student intake – are eligible for funding.

“We use the flipped classroom approach and expect the children to do their own background reading and research on the internet,” continues Mr Chu. “There are no textbooks. The students use their computers instead. Lessons are uploaded, exercises are done and assessment takes place with software that not only shows what the children have understood and what they have not, but also helps teachers identify problems and make improvements to strategies where necessary.” ■

“ Our approach is not for every school. It offers choice. That’s the beauty of Hong Kong. It is a place where there is freedom to choose. ”



**Principal Chu Tsz-wing
Baptist Rainbow Primary School**



Creative learning at the school is based on many factors apart from ICT. Another student project starts with collecting cardboard. “The children have seen elderly scavengers in the streets and were touched by their determination. They decided to see what could be made of discarded cardboard to add value to it rather than just taking it to a recycling centre.” Partners in the design industry showed them how to make attractive, practical furniture and then a marketing company showed them how to sell it. Proceeds are donated to the elderly poor and the children learn how to integrate skills, collaborate and show sympathy for others.

Another DreamStarter project involves food waste recycled in a donated food processor to create fish food. This is used to feed edible fish which are bred in a tank then given to poor elderly people. The children learn about environmentally-friendly waste treatment and farming but at the same time they see that the skills they learn can benefit other people.

The DreamStarter initiative will adopt three other schools to join its programme each year. Those schools will have similar principles and values, Principal Chu explains. One of the criteria for their adoption will be a commitment to adopt another three schools to follow their lead a year later. “But our approach is not for every Hong Kong school. It offers choice,” he points out. “That’s the beauty of Hong Kong. It is a place where there is freedom to choose.”



“ We question ourselves all the time. We never do things because they were done that way in the past. ”

Baptist Rainbow encourages independent thinking, adaptability, imagination and curiosity. “We believe that education and learning should be enjoyable. It should lead to change for the better and it should be creative. Parents also realize that their children will be growing up and joining the workforce at a very challenging time: 2047 will be on the near horizon.” They will need effective work skills and be able to think for themselves.

When asked what advice he would give to any other Hong Kong school wishing to adopt creative learning while maintaining standards and academic results, Principal Chu advises following his motto: Start with “Why?” and then go on to “How?”

“That’s how we do it at Rainbow. We question ourselves all the time. We never do things because they were done that way in the past.” ■

浸信會天虹小學朱子穎校長在校內大力推動 STEM 教學模式。透過設置大量相關的硬件及軟件，學生得以將創意發揮得淋漓盡致。該小學曾經面對殺校危機，學校於低潮時期，只有 14 位教師和 6 班學生。朱校長致力改變現狀，於過去三年積極嘗試新的教學模式，且成功吸引志同道合的教師，一起推動 STEM 課程。今年該校學生人數已突破 400 人。現時，學生大部分的課堂都集中在上午，而下午則可全力按學生個人興趣，參加由教師帶領的工作坊。這種方式不僅為學校帶來轉機，同時成為其他學校的參考對象。朱校長又認為，學校轉型過程中，家長的支持功不可沒。

Glossary and more information

Baptist Rainbow Primary School rainbow.edu.hk/

DreamStarter facebook.com/dreamstarter.hk/

Flipped classroom The flipped classroom gives students their first exposure to new material outside the classroom, usually via reading on the internet or watching videos. Class time is used for assimilating knowledge through strategies such as problem-solving, discussion or debates.

HKT a Hong Kong mobile telecommunications operator

ICT information and communications technology

NET native English-speaking teacher

STEM Science, Technology, Engineering & Mathematics



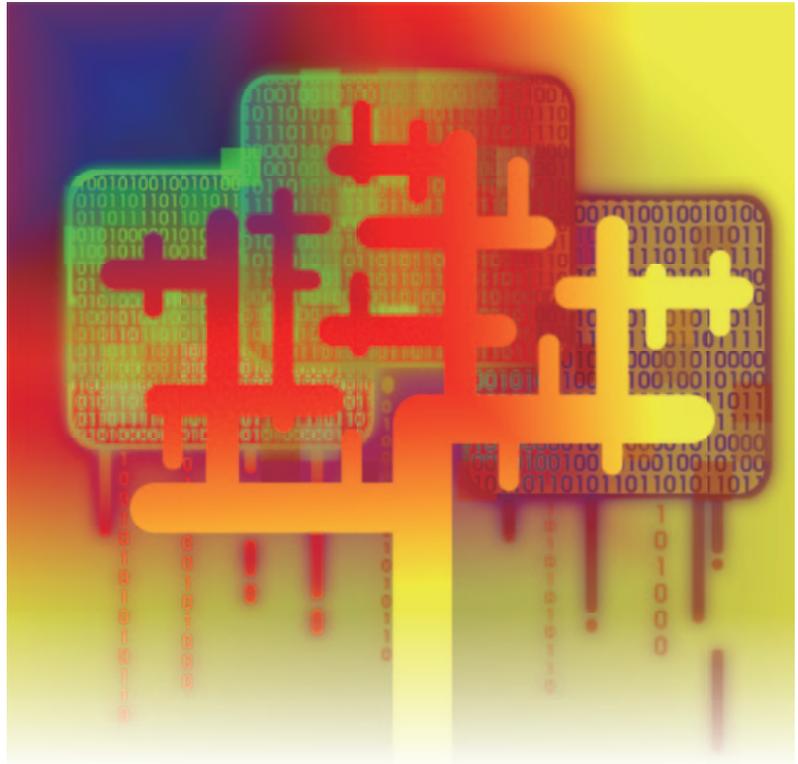
CoolThink@JC

21st century digital skills

Recognizing how essential computer skills are, The Hong Kong Jockey Club Charities Trust recently launched CoolThink@JC to introduce computational thinking into the primary school curriculum. Mr Leong Cheung, the Club's Executive Director of Charities and Community, and Prof Daniel Lai, CoolThink@JC Programme Director, explain that the underlying philosophy is wide-reaching.

CoolThink@JC is a four-year programme with Hong Kong primary schools funded by The Hong Kong Jockey Club Charities Trust with a donation of HK\$216 million. Its aims are to develop coding at primary school level while building teacher capacity. "Learning from experts and analyzing global trends," says Mr Cheung, "we realized we should focus not only on coding but on logical, critical and computational thinking and on mastering algorithms used to solve real problems."

The programme is expected to benefit over 16,500 Primary 4 to 6 students at 32 Hong Kong schools plus 100 teachers and 200 teaching assistants. The schools represent a balanced mix, explains Professor Lai. "They include some that are not quite ready to offer coding lessons, some where students already know how to code, and others that have a higher than average concentration of special needs or ethnic minority students."



“*This is definitely not just about acquiring one more skill for a child’s portfolio ... it’s about discovering progressive, step-by-step problem-solving for real life using computer technology.*”

Mr Leong Cheung

Call for commitment

Professor Lai recalls that around 400 participants from nearly 200 schools attended the briefing and 150 applications were received. “There was a rigorous selection process that depended on the schools’ vision and level of commitment. It was not just a question of a donation to get lessons in coding up and running. We were looking for a commitment of time, resources and effort to participate in a large-scale study.”

Two pilot schools, one of which is the Baptist Rainbow Primary School, are now setting up a CoolThink@JC classroom, providing electronic equipment and a set of tools to encourage students to learn coding. Mr Cheung stresses that the programme is definitely not just about acquiring one more skill for a child’s portfolio. “Neither is it about finding a one-time perfect solution to a one-off problem. Instead, it’s about discovering progressive, step-by-step problem-solving for real life using computer technology.”

Programming software such as Scratch and MIT App Inventor is being used to generate the children’s interest. “When I went to school I learned Basic, a syntax-based programming language,” Mr Cheung continues. “It was not very intuitive but this latest generation of coding language software is more like building blocks, it’s plug and play and using it can be fun.” This builds motivation to learn.

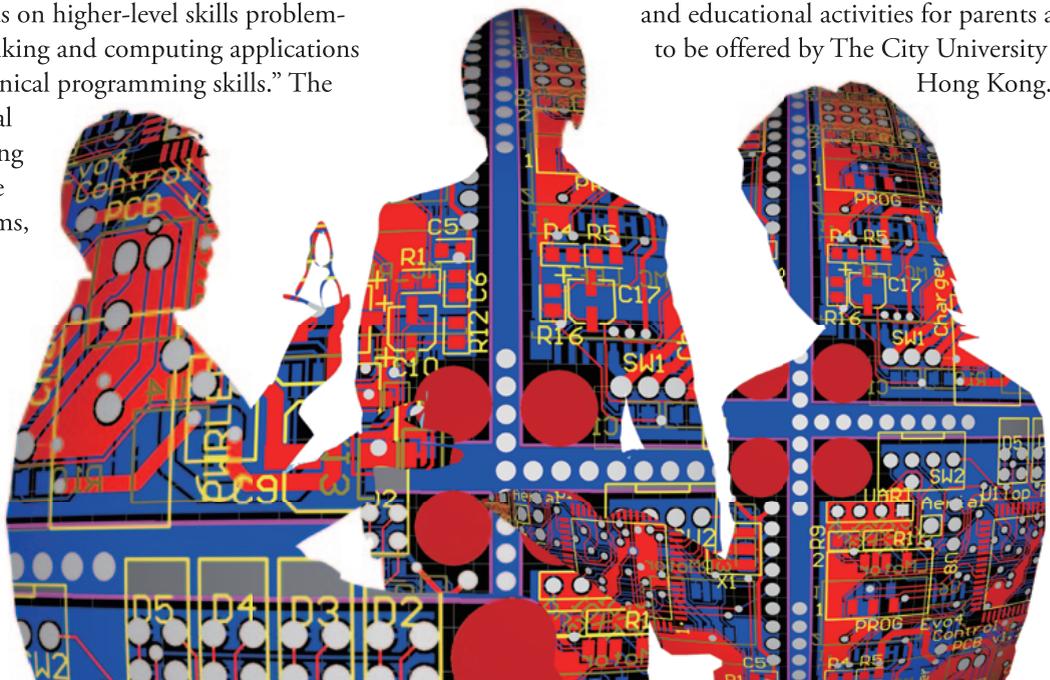
Although the hope is to equip all primary school pupils in the programme with basic coding skills, there is a broader goal. “We want to focus on higher-level skills problem-solving, on critical thinking and computing applications rather than purely technical programming skills.” The focus is also on practical applications, Mr Cheung says, developed to solve real nitty-gritty problems, not just projects for making toys or robots.

Scientific evaluation and assessment

Another significant element is scientific evaluation. To make it effective for the medium to long term, the intention is to use assessment tools designed by Stanford Research Institute. “The tools will measure learning outcomes and there will be post- and pre-tests every year for 16,500 students in all of the 32 participating schools,” Professor Lai explains. 24 other schools will also be involved as a control, crucial for evidence-based assessment. “We know of nothing else on this scale worldwide,” he noted.

The programme is being co-created by The Hong Kong Jockey Club Charities Trust, the Education University of Hong Kong, the Massachusetts Institute of Technology and The City University of Hong Kong, with the support of the Education Bureau (EDB). “We work closely with EDB,” notes Professor Lai, “addressing implementation and practical issues at the school level.” With the collaboration of all sectors—government, academia, business and NGOs—it is hoped to create a valuable reference for change and the incorporation of computing and coding into Hong Kong core educational curricula at both primary and secondary level in future.

Community outreach to parents will take place as well as awareness-raising among the general public. That is especially important given the falling level in uptake of ICT in Hong Kong secondary schools. All stakeholders and partners need to be convinced of the value of teaching computational skills and so training for teaching assistants and educational activities for parents are to be offered by The City University of Hong Kong.



“
The tools will measure learning outcomes and there will be post- and pre-tests every year for 16,500 students in all the 32 participating schools.”

Professor Daniel Lai

Localized for community of practice

Asked about the teaching resources to be provided in schools, Mr Cheung outlines lesson plans and projects that are being localized specifically for Hong Kong. Topics relate to concerns such as the environment, comfort for the elderly, intergenerational harmony and convenient smart homes of the future. “Some materials will be available on the e-learning and resource CoolThink portal which will also function as an assessment platform and for the sharing of experience with teachers and parents in a community of practice,” explains Professor Lai.

“We are still at an early stage,” Mr Cheung cautions gently. “First, we need to get it right with the two pilot schools now involved. It’s one thing to build a complete curriculum but it’s another to disseminate it too quickly. Response so far has been beyond our expectations but we don’t want to put the cart before the horse or increase the stress and work-load already experienced by teachers and students.”

Nevertheless, the ultimate goal is systemic change. “Today’s students will be entering the workforce in 2020,” concludes Mr Cheung. “By then, as research tells us, among the most important job skills will be problem-solving, logical thinking and critical thinking. Our goal is to equip youth with such fundamental skills for the future, to empower them to solve real-life issues and become creators in the digital world.” ■



(Right) Mr Leong Cheung, Executive Director, Charities and Community, The Hong Kong Jockey Club, and former CEO of an education-focused internet venture which he founded.

(Left) Prof Daniel Lai, BBS, JP, CoolThink@JC Programme Director and Professor of Practice (Computing) at The Hong Kong Polytechnic University is the former Government Chief Information Officer, HKSAR.

香港賽馬會最近推出為期四年的運算思維教育計劃。香港賽馬會慈善及社區事務執行總監張亮先生表示，該計劃目的是提升小學生的運算思維能力，並讓他們學習編程知識和技巧，期望他們能將所學，應用在日常生活中，迎接數碼時代的來臨。計劃同時亦為本地教師提供培訓；計劃總監賴錫璋教授補充稱，計劃將會為本港 32 間小學共 16,000 名學生提供培訓，並透過合作機構，培訓 100 位小學教師及 200 位教學助理。此外，計劃亦會以科學化的方法評估成效，為其他國家、地區提供有用數據，作進一步研究。

STEM: the changing classroom

Jennifer Lam looks at changes in the classroom, the promotion of STEM creative and learning strategies around the world to help children meet the challenges of the 21st century.

Hong Kong

The senior secondary curriculum was reformed in 2009, introducing Liberal Studies to encourage critical thinking and reflection skills and Applied Learning with more practical courses. Liberal Studies involves no syllabus – only broad topics – and relies mostly on current affairs and non-textbook information. They are designed to spur students to ask questions, find directions for analysis, synthesis and conceptualization, and propose hypotheses or theories.¹ The Education Bureau (EDB) lists the development of creative thinking and mastering independent learning skills among its learning goals.²

A consultation document on STEM (Science, Technology, Engineering & Mathematics) education was issued by the EDB in November 2015 with strategies intended to have a direct bearing on school-based curriculum development over the next decade.³ The intention is to maintain Hong Kong's international competitiveness, strengthen students' ability to integrate and apply knowledge and skills across subject disciplines, and to create practical solutions to daily problems with innovative designs and creative thinking.

Mainland China

In 2010, the Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010-2020) announced a blueprint for achieving modernization of education by 2020.⁴ The Outline called for student-oriented development with a learner-centred approach to promote problem-solving skills. Shanghai schools have been given special authority to experiment with reform and create their own curricula. Part of the new curriculum includes an emphasis on creative and critical thinking. Teachers in Shanghai are encouraged to allow time for student activities in classrooms rather than relying solely on presentations.⁵ The Shanghai government is developing a new policy to reduce student workload and to refocus the quality of student learning experiences over quantity.⁶

In 2004, the Ministry of Education launched the New

Curriculum Reform to address STEM-related secondary education. The reforms included shifting the emphasis from accumulating knowledge to the development of scientific literacy with inquiry-based teaching. The new curriculum standards related to science are based on developing scientific literacy and teaching science through inquiry.⁷



by Black Station flic.kr/p/6S7PUW

Australia

All state primary and secondary schools are required to teach critical and creative thinking to help students learn how to generate and evaluate knowledge, solve problems in and out of school and improve learning abilities. All subjects are expected to have a creative element. Focus on STEM in schools has four key elements. First, innovative mathematics curriculum resources for primary and secondary school students focus on inquiry-led teaching. Second, computer coding is taught across the curriculum, ultimately to expand the pool of ICT-skilled workers. Third, support is given for young people making the transition from school to a STEM-related diploma, advanced diploma or associate degree and work with an industry-supported pathway. Fourth, there are summer schools for STEM students, with the focus on girls, disadvantaged and indigenous students.⁹

Canada

Provincial governments across Canada implement education strategies that focus on developing specific competencies for 21st century learning, focusing on critical thinking, communication, collaboration, character, creativity, innovation, as well as digital and computer literacy.¹¹ In Ontario, the largest province, there has been a deliberate province-wide focus on ensuring that all schools offer instruction for the development of critical, higher-order thinking skills in all subjects in the curriculum.¹² In addition, critical thinking explores big ideas and real-world issues, such as the environment and the economy.¹³ Although Canadian students have performed quite well in PISA (Program for International Student Assessment) rankings and Canada ranks in the top ten in both math and science results, due to federal arrangements it is quite difficult to assess the relative overall success of provincial policies for STEM and creative learning.¹⁴

Finland

In 2013, reform of an already very successful education system began by replacing traditional “teaching by subject” in favour of “teaching by topic” by 2020, using creative techniques where subject-specific lessons are replaced by “phenomenon” teaching, merging elements of subjects such as economics, history, languages and geography.¹⁵ All Finnish schools must introduce a period of “phenomenon-based teaching” at least once a year, with projects



by Dennis Jarvis flic.kr/p/79YRs4

lasting several weeks. The policy puts creativity and experimentation on a par with teaching for academic achievement and schools focus on preparing people for an economy in which creativity, innovation and entrepreneurship will continue to be drivers of progress.¹⁶

The overall uptake of studies in the STEM disciplines is higher than in other European countries, considerably so in many cases. The reasons for this are a function of history, culture and government policy support for education and equality. In international tests like PISA, Finnish school students excel, even though they have fewer hours of direct tuition and less homework than students in countries known for long school days, high-pressure standardized testing, and competitiveness-boosting after-hours tutoring sessions.¹⁷



Japan

The Japanese Ministry of Education, Culture, Sports, Science and Technology places emphasis on Japanese, social studies, mathematics, science and foreign languages, with the hope that students will develop “thinking capacity, decisiveness and expressiveness.” Japan has no comprehensive national STEM policy but has recognized four key strategies. First, enhancement of compulsory STEM education through revision of national curriculum guidelines. Second, the nurture and training of STEM talent through “elite” education. Third, easier transitions from university to career paths for graduates in STEM fields. Fourth, greater representation of women in STEM education and careers.

Singapore

By 2017 every secondary school will develop two distinctive programmes for a more student-centred experience connecting academic skills with the real world and developing students’ character and values.¹⁷ Primary and secondary school students will employ collaborative tools for discussions with classmates and teachers. Reform strategies include less dependence on rote learning, repetitive tests and instruction, and more on engaged learning, discovery through experiences, differentiated teaching, learning of lifelong skills, and the building of character through innovative and effective teaching approaches and strategies. Although the strategy was designed to address the country’s education system in general, it is in line with STEM-based education, where the diversity of teaching and learning approaches are pursued.¹⁸

South Korea

A transformation is taking place to encourage creative and critical thinking skills for a creative economy.¹⁹ Two major educational reforms mean every child will have one semester with no testing and engage in a more interactive curriculum based on discussions and teamwork rather than rote learning. Another pilot programme focuses on developing computational and coding skills, and creative expression through software. Korean students have outstanding achievements in maths and science, according to PISA. However, Korea has experienced a brain drain from science and engineering despite remarkable economic development and advancement in science and

technology. The main factor is remoteness of STEM teaching from real-life applications. Education experts and researchers look to reform in STEM education for a new way of solving problems where teaching and learning are integrated with other subjects including the arts in order to increase students’ curiosity and interest.²⁰



Australia-Korea creativity initiative



Global Conversations: Korea is a Sydney Opera House Digital Learning initiative funded by the Australia-Korea Foundation. Schools in both countries partner up to participate in a series of live, interactive digital tours, live-streamed performances and digital workshops aimed at increasing cross-cultural awareness and collaboration, and developing cultural literacy. The first pilot involved more than 200 students from 10 schools in Australia and Korea participating in a 3-part series of digital learning activities including a digital tour of Sydney Opera House, a live-streamed performance and a post-show workshop unpacking the themes and learnings from the play.

Source sydneyoperahouse.com/creative_learning/global_conversations_korea.aspx

United Kingdom

Many consider the English Baccalaureate (EBacc) restrictive and worry that music, art, design, technology, drama and many more creative subjects will now be squeezed out.²¹ A 2010 Ofsted study recommended creative ways of learning with secure coverage of National Curriculum subjects; provision of continuing professional development to ensure skills and confidence to encourage pupils to be independent and creative learners and to ensure that all pupils develop skills in technology to support independent and creative learning.²² The uptake of STEM subjects among young people has not increased, according to a 2016 report.²³ It mentions poor perceptions and attitudes towards engineering careers, a shortage of specialist teachers in STEM subjects and the need for teachers to engage in professional STEM development and the application of science and mathematics to real-life contexts.



Portrait of Place

This creative learning project in the Manchester area of Britain involved children from a wide variety of cultural backgrounds and was used during the transition from primary to secondary levels. The project was a way for them to explore, find their personal and group identity, connect with and generate a sense of ownership/belonging. Rather than using a text or TV show, the children explored their local area to find out about social history and development and begin to piece together the identity (and ownership) of their community around the school. This involved interdisciplinary music and visual art work combined with literacy, history and geography.

United States

Increasing the number of students and teachers proficient in STEM was a priority set by the Obama administration.²⁴ A study conducted in 2012 found all aspects of student creativity at the K-12 level had been in significant decline



for the last few decades.²⁵ The focus is on improving STEM instruction from preschool through 12th grade; increasing and sustaining public and youth

engagement with STEM; improving the STEM experience for undergraduate students; better serving groups historically underrepresented in STEM fields; and designing graduate education for tomorrow's STEM workforce. ■

Sources

1. oecd.org/education/school/programme-for-international-student-assessment-pisa/49802616.pdf
2. edb.gov.hk/en/curriculum-development/list-page.html#
3. Promotion of STEM Education – Unleashing Potential in Innovation. [edb.gov.hk/attachment/en/curriculum-development/renewal/Brief%20on%20STEM%20\(Overview\)_eng_20151105.pdf](http://edb.gov.hk/attachment/en/curriculum-development/renewal/Brief%20on%20STEM%20(Overview)_eng_20151105.pdf)
4. internationaleducation.gov.au/International-network/china/publications/Documents/China_education_plan_summary_pdf.pdf
5. asiasociety.org/global-cities-education-network/shanghai-worlds-best-school-system
6. oecd.org/education/school/programme-for-international-student-assessment-pisa/49802616.pdf
7. moe.edu.cn/jyb_sjzl/moe_364/moe_902/moe_1001/tnull_10300.html
8. australiancurriculum.edu.au/general-capabilities/critical-and-creative-thinking/introduction/introduction
9. studentsfirst.gov.au/restoring-focus-stem-schools-initiative
10. actioncanada.ca/wp-content/uploads/2014/04/TF2-Report_Future-Tense_EN.pdf
11. oecd.org/education/school/programme-for-international-student-assessment-pisa/49802616.pdf
12. oecd.org/education/school/programme-for-international-student-assessment-pisa/49802616.pdf
13. acola.org.au/PDF/SAF02Consultants/Consultant%20Report%20-%20Canada.pdf
14. independent.co.uk/news/world/europe/finland-schools-subjects-are-out-and-topics-are-in-as-country-reforms-its-education-system-10123911.html
15. oecd.org/education/school/programme-for-international-student-assessment-pisa/49802616.pdf
16. acola.org.au/pdf/saf02consultants/consultant%20report%20-%20finland.pdf
17. moe.gov.sg/docs/default-source/document/education/files/student-centric-values-driven-flyer.pdf
18. acola.org.au/PDF/SAF02Consultants/Consultant%20Report%20-%20Singapore.pdf
19. asiapacific.ca/sites/default/files/filefield/south_korea_education_report_updated.pdf
20. acola.org.au/pdf/saf02consultants/consultant%20report%20-%20korea.pdf
21. telegraph.co.uk/education/educationopinion/12095460/One-size-fits-all-curriculum-will-force-creative-subjects-out-of-schools.html
22. creativitycultureeducation.org/wp-content/uploads/learning-creative-approaches-that-raise-standards-250.pdf
23. raeng.org.uk/publications/reports/uk-stem-education-landscape
24. ed.gov/stem
25. forbes.com/sites/darden/2015/03/19/how-americas-education-model-kills-creativity-and-entrepreneurship-2/#78a7ce271ac7



Conference on Youth Technology Crime

Thursday 19 January 2017 2:45pm

Auditorium, HKFYG Building, 21 Pak Fuk Rd, North Point

HOT TOPICS

CAUSES OF TECHNOLOGY CRIME

TRENDS & STATISTICS

CASES STUDIES AND RELATED LEGAL ASPECTS

DETECTION

PREVENTION STRATEGIES

MEDIA LITERACY EDUCATION

Guest speakers



Kenny KS Wong Chairman, Intellectual Property Committee, The Law Society of Hong Kong

The Analysis of Trends in Technology Crime



Dr KP Chow Chairman, Information Security and Forensics Society

Forensic Investigation of Technology Crimes and Its Challenges



Dicky TK Wong Detective Senior Inspector, Cyber Security and Technology Crime Bureau, Hong Kong Police Force

Cases and Offenses of Juvenile Delinquency in Technology Crime



Albert WH Luk Barrister-at-Law

The Application and Deficiencies of Local Law in Technology Crimes

PLUS from HKFYG

Bob Lee & Andy Chan Youth Crime Prevention Centre & Media Counselling Centre

Risk Factors for Juveniles Involved in Technology Crime, Prevention Strategies and Literacy Education

FOR REGISTRATION CONTACT Bob Lee 24876151

Website yipc.hkfyg.org.hk/youthlaw

Partners District Fight Crime Committees: Kowloon City, Kwai Tsing, Sai Kung, Sha Tin, Southern, Tai Po, Tsuen Wan, Wan Chai, Yau Tsim Mong
Hong Kong Computer Society
Information Security and Forensics Society (ISFS)
Internet Society Hong Kong (ISOC Hong Kong)
Professional Information Security Association Ltd

More information

Youth Hong Kong September 2016

Cyber Deviance

Online at youthhongkong.hkfyg.org.hk/v8n3.php



CREATIVE EDUCATION CALENDAR

February – September 2017

February

2017 Innovation and Technology Scholarship Award Scheme

Goal Offering opportunities for 25 outstanding science undergraduates to gain global exposure

Four programmes Overseas/mainland attachment; mentorship, service project, local internship

Nomination deadline 10 February 2017

Scholarship up to HK\$150,000 per awardee

Full details innotechsolarship.hkfyg.org.hk

Enquiries Ken Li 2561 6149



2016/17 Hong Kong FLL Robotics Tournament

Goal Promoting STEM while developing programming skills, creativity and teamwork

Date Saturday 11 February 2017

More details ccst.hkfyg.org.hk

Enquiries Carlos Lo 2561 6149

Lee Kum Kee Family Foundation Loving Family Animated Card Design Competition

Goal Encouraging all of the family to use creative Scratch animation and coding

Deadline for registration 24 February 2017

More details and online entry lead.hkfyg.org.hk/files/lead/lead/index-EN.html

Enquiries Edmond Hui 3106 0600

March / April

2017 Hong Kong Student Science Project Competition

Goal Promoting youths' interest in science and technology through research and invention

Initial judging Saturday 18 March 2017

Final Friday 14 April 2017

More details hksspc.hkfyg.org.hk

Enquiries Kimpton So 2561 6149

SPRING 2017

LEAD FORUM COMING SOON

ENQUIRIES lead.hkfyg.org.hk

May

Hong Kong GreenMech Contest

Goal Promoting STEM and green energy

Date Saturday 6 May 2017

More details ccst.hkfyg.org.hk

Enquiries Benny Cheng 2561 6149

July

2016/2017 Creative Coder Competition



Goal Enhancing STEM education and coding with Arduino multifunction software and hardware

Date Saturday 8 July 2017 (tentative)

More details ccst.hkfyg.org.hk

Enquiries Edward Mak 2561 6149

2017 Hong Kong 4D Frame Maths & Science Creativity Competition



Goal Developing creative scientific skills with 4D Frame design and structure

Competition date Mid July 2017 (tentative)

More details lead.hkfyg.org.hk

Enquiries Jasper Chu 3106 0600

September

2016/2017 1+1 Science Tip-top Talent Scheme

Goal Providing intensive training to nurture gifted students as tomorrow's scientists

Project presentation 30 September 2017

More details ccst.hkfyg.org.hk

Enquiries Jessica Chan 2561 6149



and creative education : a growing family

After over ten years of gathering schools under the umbrella of LEAD and creative education learners and teachers give some feedback.

Kindergartens

- HKFYG Ching Lok Kindergarten (Sai Wan Ho)
- HKFYG Ching Lok Kindergarten (Yaumatei)
- Kin Sang Lutheran Kindergarten
- Learning Habitat Kindergarten
- Lui Cheung Kwong Lutheran Kindergarten
- S.K.H. St. Christopher's Nursery (Wan Chai)
- Sisters of the Immaculate Heart of Mary Gospel Sau Mau Ping Child Care Centre cum Kindergarten
- St. James' Settlement Causeway Bay Kindergarten

Primary Schools

“ On the overseas trip after we won in the local competition in 2016, we learnt so much from other participants from around the world. It was unforgettable and will help me face other challenges with more confidence and initiative. ”

Jethro Wong, STFA Wu Siu Kui Memorial Primary School, FLL award-winner

- Alliance Primary School Sheung Shui
- Alliance Primary School, Whampoa
- Apleichau St. Peter's Catholic Primary School
- Aplichau Kaifong Primary School
- Baptist (STW) Lui Ming Choi Primary School
- Buddhist Lam Bing Yim Memorial School
- Buddhist Wing Yan School
- C.&M.A. Chui Chak Lam Memorial School
- C.C.C. Chuen Yuen First Primary School
- C.C.C. Chuen Yuen Second Primary School
- C.C.C. Fong Yun Wah Primary School
- C.C.C. Heep Woh Primary School
- C.C.C. Kei Faat Primary School (Yau Tong)
- C.C.C. Kei Tsz Primary School
- C.C.C. Mong Wong Far Yok Memorial Primary School
- C.C.C. Tai O Primary School
- C.C.C. Wanchai Church Kei To Primary School (Kowloon City)
- Canossa Primary School (San Po Kong)
- Canossa School (H.K.) P.M.
- Caritas Lok Jun School
- Carmel Leung Sing Tak School
- Castle Peak Catholic Primary School
- Chan Sui Ki (La Salle) Primary School
- Chinese International School (Primary Section)
- Chiu Sheung School Hong Kong
- Chio Yiu Catholic Primary School

- Christian Alliance S.Y. Yeh Memorial Primary School
- Conservative Baptist Lui Ming Choi Primary School
- Creative Primary School
- Diocesan Boys' School Primary Division
- Diocesan Preparatory School
- Dr. Catherine F. Woo Memorial School
- ELCHK Ma On Shan Lutheran Primary School
- ELCHK Wo Che Lutheran School
- Emmanuel Primary School, Kowloon
- Farm Road Government Primary School
- FDBWA Chow Chin Yau School
- F.S.F.T.F. Fong Shu Chuen Primary School
- Fanling Assembly of God Church Primary School
- Fanling Government Primary School
- Fuk Wing Street Government Primary School
- Fukien Secondary School Affiliated School
- Fung Kai Innovative School
- Fung Kai No.2 Primary School
- G.C.C.I.T.K.D. Cheong Wong Wai Primary School
- GCEPSA Whampoa Primary School
- H.K.E.C.A. Wu Si Chong Memorial School
- H.K.F.E.W. Wong Cho Bau School
- Hang Hau Central Shing Hang Fong Memorial Primary School

“ With LEAD, we learn as well as the students. I realized that as facilitator my role was different role from that of classic teacher so I stand back and let the children learn by self-discovery. ”

Ms Leung Lai-mei, St Paul's Co-educational Primary School (Kennedy Road)

- Heep Yunn Primary School
- Hennessy Road Government Primary AM School
- Hennessy Road Government Primary School (P.M.)
- Heung To Middle School (TSW)
- Hing Tak School
- H.K. & Kowloon Kaifong Women's Association Sun Fong Chung College
- HKBU Affiliated School Wong Kam Fai Secondary & Primary School
- HKOCOU Logos Academy
- HKFYG Lee Shau Kee Primary School
- HKUGA Primary School
- Ho Lap Primary School (Sponsored by Sik Sik Yuen)
- Ho Lap Primary School (Sponsored by Sik Sik Yuen)
- Holy Carpenter Primary School
- Holy Family School
- Hong Kong And Macau Lutheran

- Church Ming Tao Primary School
- Hong Kong & Macau Lutheran Church Primary School
- Conservative Baptist Lui Ming Choi Primary School
- Hong Kong Southern District Government Primary School
- Hong Kong Student Aid Society Primary School
- Ka Ling School Of The Precious Blood
- Kellett School
- Kiangsu & Chekiang Primary School
- King's College Old Boys' Association Primary School
- Kowloon Bay St. John the Baptist Catholic Primary School
- Kowloon Rhenish School
- Kowloon Tong Government Primary School
- Kowloon Women's Welfare Club
- Li Ping Memorial School
- Kwai Ming Wu Memorial School of the Precious Blood (P.M.)
- Kwong Ming Ying Loi School
- Kwun Tong Government Primary School (A.M.)
- La Salle Primary School
- Lee Chi Tat Memorial School
- Lei Muk Shue Catholic Primary School
- Ling Liang Church Sau Tak Primary School
- Lions Clubs International Ho Tak Sum Primary School
- Lok Sin Tong Lau Tak Primary School
- Lok Sin Tong Primary School
- Ma On Shan Ling Liang Primary School

“ We thought Scratch would be very difficult but after the first lesson, students were able to design games. It is much easier than we thought! Our students also worked with special needs students and learnt patience and communication skills. ”

Teachers at Sacred Heart Canossian School (Private Section)

- Ma On Shan Lutheran Primary School
- Ma Tau Chung Government Primary School (Hung Hom Bay)
- Marymount Primary School
- Munsang College (Primary Section)
- N.T.W.J.W.A. Ltd. Leung Sing Tak Primary School
- North Point Government Primary School
- North Point Primary School (Cloud View Road)
- Oblate Fathers Primary School
- Pak Tin Catholic Primary School
- Pentecostal Gin Mao Sheng Primary School
- Pentecostal Yu Leung Fat Primary School

- PLK Dr. Jimmy Wong Chi-Ho (Tin Sum Valley) Primary School
- PLK Grandmont Primary School
- PLK Wicwood K.T. Chong No.2 Primary School AM
- PLK Cameos Tan Siu Lin Primary School
- PLK Chee Jing Yin Primary School
- PLK Grandmont Primary School
- PLK Leung Chow Shun Kam Primary School (PM)
- PLK Hing Too Primary School
- PLK Mrs. Chan Nam Chong Memorial Primary School (A.M.)
- PLK Mrs. Chan Nam Chong Memorial Primary School (P.M.)
- PLK Riverain Primary School
- PLK Tin Ka Ping Millennium Primary School
- Po Yan Catholic Primary School
- Precious Blood Primary School
- Precious Blood Primary School (South Horizons)
- Priest Memorial Catholic Primary School
- Pui Kiu College (Primary Section)
- Pui Ling School of the Precious Blood
- Rosaryhill School (Primary Section)
- Salesian School
- Singapore International School (Hong Kong)
- S.K.H. Chi Fu Chi Nam Primary School
- S.K.H. Fung Kai Millennium Primary School
- S.K.H. Kei Hin Primary School
- S.K.H. Kowloon Bay Kei Lok Primary School
- S.K.H. Lui Ming Choi Memorial Primary School (P.M.)
- S.K.H. Ma On Shan Holy Spirit Primary School
- S.K.H. St. James' Primary School (A.M.)
- S.K.H. Tak Tin Lee Siu Keung Primary School
- S.K.H. Tak Tin Lee Siu Keung Primary School
- S.K.H. Wei Lun Primary School
- S.K.H. Yuen Chen Maun Chen Jubilee Primary School
- S.K.H. Yuen Chen Maun Chen Primary School
- S.K.H. Yan Laap Primary School
- S.K.H. Yautong Kei Hin Primary School
- S.T.F.A. Leung Kit Wah Primary School
- S.T.F.A. Wu Mien Tuen Primary School

“ LEAD lets students think outside the box. That's still very rare in the traditional educational context. It gives them self-confidence because they create something new from scratch, purely of their own design, developing team spirit in the process. ”

Mr Mak, St Paul's Co-educational Primary School



Learning through Engineering Art and Design

Since 2005, HKFYG has spearheaded creative education with LEAD in collaboration with the MIT Media Lab, expanding the accessibility and potential of inventive learning.

The unique, creative LEAD programme gives young people a hands-on way of learning with imagination, innovation, discovery and creativity free of right and wrong answers.

HKFYG's new LEAD labs integrate the elements of robotics and coding with education. The approach is interdisciplinary with real-world applications and state-of-the art facilities enabling experimentation and discovery.

Headquartered in North Point with five satellites in the community, LEAD labs provide the space, environment and encouragement young people need for innovative, practical thinking. Challenging competitions offer the chance of overseas exchange and generate a culture of life-long learning.



Some **LEAD** lab Programme Highlights

LEAD labs offer a wide range of activities for students interested in science, technology, engineering, art, design and mathematics.

Creative Coding Series: Scratch Workshop (Beginners)

Programming skills and techniques are strengthened by optimizing creative project designs and incorporating custom-made elements in interactive games and animations.

Creative Coding Series: Arduino Sumo Robot Workshop

The principles of ultrasound, infrared and other electronic sensors are learned and the Arduino programme is applied to make robots into toy Sumo wrestlers in this coding workshop.

Innovative Maker Series: 3D Printing (Beginners)

Using the Tinkercard platform, 3D models are designed and created on an open source platform using a 3D printer.

Innovative Maker Series: 3D Printing (Advanced)

Participants learn to design 3D animal models with Tinkercard incorporating electronic components.

Fun Science Series: Renewable Energy

Participants learn the basic theories of energy production and work with wind turbines, solar panels and thermoelectric generators.

Fun Science Series: Aquaponics

The fundamentals of life processes in water are explored using DIY to see how fish and plants can grow together in an integrated system.

Where are the LEAD labs?

Headquarters at HKFYG Building

1/F, 21 Pak Fuk Road,
North Point, Hong Kong

☎ 3106 0600
✉ lead@hkfyg.org.hk
📍 lead.hkfyg.org.hk

HKFYG Jockey Club Hung Hom Youth SPOT

3-5/F, Ka Hing Lau, Ka Wai Chuen, 48 Ma
Tau Wai Road, Hung Hom, Kowloon

☎ 2774 5300
✉ hhjt@hkfyg.org.hk
📍 hh.hkfyg.org.hk

HKFYG Tsuen King Youth SPOT

G/F & 1/F, Block 10, Tsuen King Garden, 76-84
Tsuen King Circuit, Tsuen Wan, New Territories

☎ 2498 3333
✉ tk@hkfyg.org.hk
📍 tk.hkfyg.org.hk

HKFYG Heng Fa Chuen Youth SPOT

G/F, Carpark Block West, 100 Shing Tai Road,
Heng Fa Chuen, Chai Wan, Hong Kong

☎ 2557 0142
✉ hfc@hkfyg.org.hk
📍 hfc.hkfyg.org.hk

HKFYG LOHAS Youth SPOT

The Capitol, LOHAS Park, 1 Lohas Park
Road, Sai Kung, New Territories

☎ 2702 2202
✉ ls@hkfyg.org.hk
📍 ls.hkfyg.org.hk

HKFYG Jockey Club Tin Yuet Youth SPOT

2/F, Ancillary Facilities Block, Tin Yuet Estate,
Tin Shui Wai, Yuen Long, New Territories

☎ 2445 5777
✉ tyt@hkfyg.org.hk
📍 tyt.hkfyg.org.hk

Enquiries easymember.hk



What is LEAD?

The HKFYG LEAD creative learning project (Learning through Engineering, Art and Design) offers interdisciplinary learning activities and technological literacy. LEAD has worked with hundreds of Hong Kong schools on integrative learning, benefiting thousands of students in the LEAD Creative Class programme.

First steps in building the LEAD family of schools and students began with St Paul's Co-educational College Primary School, Marymount Secondary School, Wa Ying College and Sau Mau Ping Catholic Primary School. Teachers, parents and pupils attended multimedia design and technology workshops, moving towards inclusive, student-centred learning via interschool collaboration. LEAD also introduces interdisciplinary, integrative learning to special needs schools.

Learning

Creative learning is at the heart of the **LEAD** project. There are as many definitions of creative learning as there are of creativity itself but essentially it involves learning by doing and making. Its goal is to motivate children to express themselves, ask questions, challenge assumptions and be imaginative. In particular, they are encouraged to explore multiple possibilities when faced with problems, to work collaboratively, hands-on and to reflect on their actions and decisions in their own time and in their own way rather than receiving facts that are transmitted by teachers and accepting them through rote learning. In many schools today creative learning also provides basic skills that include coding, skills for problem-solving, while leaving aside any need to find the “right answer” to every question.

What is STEM?

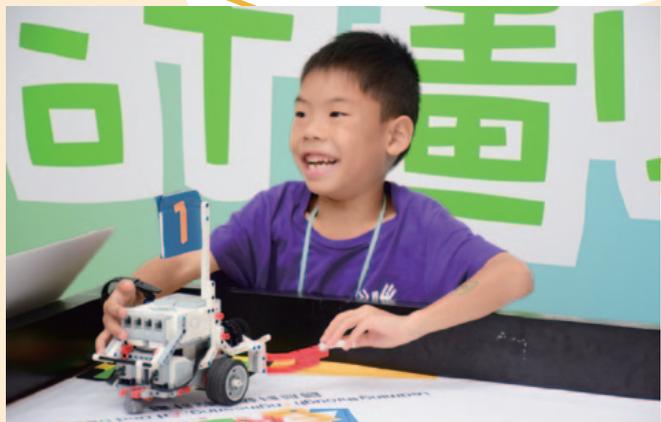
STEM is based on an interdisciplinary and applied approach to science, technology, engineering and mathematics. Instead of teaching four separate, discrete subjects, the aim of STEM education is to integrate them and make them applicable to real-world problem-solving.



Engineering in education involves studying the world around us, its materials, systems and processes. It is an applied, iterative science that usually identifies and solves problems with technology. To delve further into engineering related subjects could include studies in mechanics, electrical and chemical engineering; electronics, robotics, bio-medical sciences, coding and even software.

What is tinkering?

The word was first used in English in the 1300s to describe people who mend household gadgets. Today, it's a perspective and a kind of play. It means spending time with tools, and materials, thinking with your hands and learning through doing. It's slowing down and getting curious about mechanics and the everyday stuff of life. It's enjoyable but often full of dead ends. Ultimately it's about inquiry: the habit of inquisitive, imaginative minds.



What is robotics?

Robotics includes mechanical engineering, electrical engineering and computer science. It deals with the design, construction, operation and use of robots and computer systems for control, feedback, and information processing. Children today find out about robotics at school as part of interdisciplinary, integrative learning.

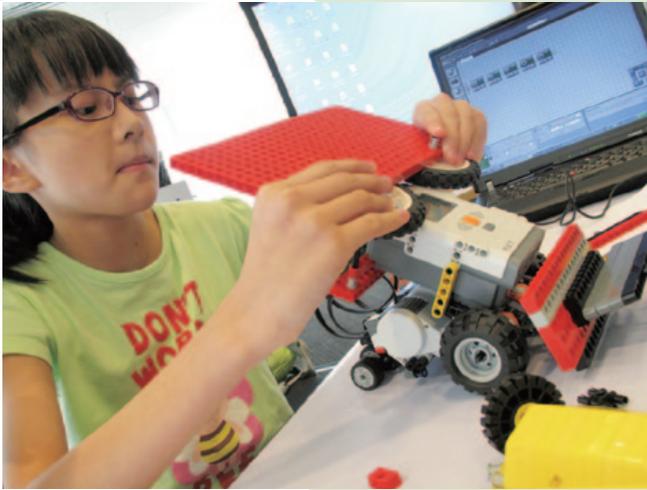
Art

in education is important for the development of creative and critical thinking. Major art forms include the performing arts, literature, media arts like photography and cinematography, and visual arts such as drawing, painting, ceramics and sculpting. Involvement in the arts can be associated with improvement in maths, reading, cognitive ability and verbal skills. Arts learning can also improve motivation, concentration, confidence and teamwork. For younger children, the arts also develop motor skills. What is most important in the arts is that they can move children away from text and numbers to using other brain receptors, and enabling them to explore the world around them in a more collaborative way.

What is STEAM?

STEAM brings together Science, Technology, Engineering, the Arts and Mathematics to guide student inquiry, dialogue and critical thinking. The introduction of "A" into the more familiar STEM concept recognizes the importance of arts education and creativity. Much research shows that activities in the arts, which use the right side of the brain, foster creativity which is essential to innovation, whereas STEM is based on skills generally using the left half of the brain and thus is logic-driven.





Design education comprises functionality and usability while teaching the theory, application and use of products. It encompasses graphic design, mobile app and web design with interactive multimedia, computer animation and motion graphics. It is a discipline where young learners gain confidence in the use of practical, applicable skills and have the chance to be creative, innovative designers.

What is coding?

Code is a set of instructions or rules that computers understand. People write code to make everyday objects like phones, watches, microwaves and cars. In fact, almost anything powered by electricity uses code. There are different levels of coding languages. Lower-level languages more closely resemble binary code while higher-level languages are easier. Many children learn to code at school with languages like Scratch and Arduino. Coding is also used for teaching maths, languages, music, art, design and information technology.

What is SCRATCH?

Scratch, a visual programming language for creating interactive stories, games, animation, music and art. Children who use it also learn mathematical and computer concepts that are important for creative thinking, logical reasoning, problem solving, and collaborative skills. **LEAD** introduced **Scratch** to Hong Kong in 2005 at its beta stage. Since then, **LEAD** has localized the software for Hong Kong's education sector, organizing hundreds of hands-on workshops and activities for young people and teachers. Soon these workshops will be at **LEAD labs** in HKFYG Youth SPOTs and schools.

Developed by MIT Media Lab's Lifelong Kindergarten Group, with financial support from the US National Science Foundation (NSF).

ScratchJr is the companion to Scratch. It's a free app to use on tablet computers. Ideal for children aged 5-7. *Developed by DevTech Research Group at Tufts University and the MIT Media Lab.*

Books about Scratch from LEAD

LEAD has pioneered Scratch education in Hong Kong since 2005. It has localized learning materials from MIT and consolidated the teaching experience gained in hundreds of schools into a fascinating book for learners, "The Scratch Musketeers 2.0." Translated into 10 languages and a best seller on Amazon.com it also won the best Youth Science Book Award for its Polish edition.



S.T.F.A. Wu Siu Kui Memorial Primary School (A.M.)
 S.T.F.A. Ho Yat Tung Primary School (AM)
 S.T.W. Dr. Catherine F. Woo Memorial School
 Sacred Heart Canossian School
 Sacred Heart Canossian School (Private Section)
 Salesian School
 Salesian Yip Hon Primary School
 Salesian Yip Hon Millennium Primary School
 Sau Mau Ping Catholic Primary School
 Sau Ming Primary School
 Shak Chung Shan Memorial Catholic Primary School
 Shanghai Alumni Primary School
 Sharon Lutheran School
 Shatin Government Primary School
 Shatin Junior School
 Shatin Methodist Primary School
 Shatin Tsung Tsin School
 Shaukiwan Tsung Tsin School
 Shek Lai Catholic Primary School
 Shek Wu Hui Public School
 SRBCPEPSA Lee Yat Ngok Memorial School
 St. Anthony's School
 St. Bonaventure Catholic Primary School
 St. Clare's Primary School
 St. Edward's Catholic Primary School
 St. Eugene de Mazenod Oblate Primary School
 St. James' Primary School
 St. Joseph's Anglo-Chinese Primary School
 St. Joseph's Primary School
 St. Mary's Canossian School
 St. Margaret's Co-educational English Secondary and Primary School
 St. Matthew's Lutheran School (S.M.P.)
 St. Patrick's Catholic Primary School (Po Kong Village Road)
 St. Patrick's School
 St. Paul's Co-educational College Primary School
 St. Stephen's Girls' Primary School
 St. Teresa's School
 T.W.G.Hs Leo Tung-hai Lee Primary School

“ One of our schools is at primary and the other is secondary level but for the LEAD Creative Class we combined efforts and became partners. A special school bus brought younger children to work with older students who acted as facilitators, helping to write design briefs and working side by side . ”

Mr Chow, Wah Ying College and Ms Yeung, Sau Mau Ping Catholic School

T.W.G.Hs Lo Yu Chik Primary School
 TWGHs Ma Kam Chan Memorial Primary School
 TWGHs Sin Chu Wan Primary School
 T.W.G.Hs Tsui Tsin Tong School
 T.W.G.Hs. Wong See Sum Primary School
 Tai Po Baptist Public School
 Tak Sun School
 Taoist Ching Chung Primary School
 The H.K.C.W.C. Hioe Tjo Yoeng Primary School
 The Hong Kong Institute of Education
 Jockey Club Primary School
 The ISF Academy (Primary Section)
 The Salvation Army Shek Wu School
 The True Light Middle School of

Hong Kong (Primary Section)
 Tin Shui Wai Government Primary School
 Tin Shui Wai Methodist Primary School
 Toi Shan Association Primary School
 Tsuen Wan Government Primary School
 Tsuen Wan Lutheran School
 Tsuen Wan Public Ho Chuen Yiu Memorial Primary School
 Tsung Tsin Primary School And Kindergarten (Primary School Section)
 Tsz Wan Shan Catholic Primary School
 Tsz Wan Shan St Bonaventure Catholic Primary School
 Tung Chung Catholic School
 Tung Koon District Society Fong Shu Chuen School
 Victoria Shanghai Academy
 Wong Tai Sin Catholic Primary School
 Wong Tai Sin Government Primary School
 Xianggang Putonghua Yanxishe Primary

“ For the First Lego League, I designed, built and programmed a robot from scratch and it actually worked! That was so satisfying and there's no doubt that coding skills can make us more competitive for the future. ”

Lee Ho-yeung, 15, Baptist Lui Ming Choi Secondary School

School of Science and Creativity
 YLPMS Alumni Association
 Ying Yip Primary School
 Yan Chai Hospital Chan Lu Sang Primary School
 Yan Chai Hospital Law Chan Chor Si Primary School
 Yan Qi Tong Tin Ka Ping Primary School
 Yantak Catholic Primary School
 Yaumati Catholic Primary School
 YCH Law Chan Chor Si Primary School
 Ying Wa Primary School
 Yew Chung International School (Primary)

Secondary Schools

Aberdeen Technical School
 Assembly of God Hebron Secondary School
 Bishop Hall Jubilee School
 Buddhist Kok Kwong Secondary School
 Buddhist Mau Fung Memorial College
 Buddhist Tai Kwong Middle School
 Buddhist Tai Hung College
 Buddhist Wong Fung Ling College
 Buddhist Wong Wan Tin College
 C.C.C. Chuen Yuen College
 C.C.C. Fong Yun Wah Secondary School
 C.C.C. Fung Leung Kit Memorial Secondary School
 C.C.C. Kei Heep Secondary School
 C.C.C. Kei Long College
 C.C.C. Kei To Secondary School
 C.C.C. Ming Kei College
 C.C.C. Mong Man Wai College
 C.C.C. Rotary Secondary School
 C.C.C. Tam Lee Lai Fun Memorial Secondary School
 C.C.C. Yenching College
 California School
 Canossa College
 Caritas Chai Wan Marden Foundation Secondary School
 Caritas Chong Yuet Ming Secondary School

“ I really enjoyed hands-on activities in the Hong Kong Student Science Project Competition like designing electronic circuits and building components and modules. ”

Leung Dik-hin, 16, Wah Yan College, Kowloon

Caritas Fanling Chan Chun Ha Secondary School
 Caritas St. Joseph Secondary School
 Caritas Yuen Long Chan Chun Ha Secondary School
 Carmel Secondary School
 Carmel Alison Lam Foundation Secondary School
 Carmel Bunnan Tong Memorial Secondary School
 Cheung Chuk Shan College
 Chi Lin Buddhist Secondary School
 Chinese YMCA College
 Ching Chung Hau Po Woon Secondary School
 Chiu Chow Association Secondary School
 Chong Gene Hang College
 Christian Alliance College
 Christian Alliance Cheng Wing Gee College
 Christian Alliance S C Chan Memorial College
 Christian Alliance S W Chan Memorial College
 Christian & Missionary Alliance
 Sun Kei Secondary School
 Chung Sing Benevolent Society Mrs. Aw Boon Haw Secondary School
 Clementi Secondary School
 CMA Choi Cheung Kok Secondary School
 CMA Secondary School
 CNEC Lau Wing Sang Secondary School
 CNEC Lee I Yao Memorial Secondary School
 Cognito College (Hong Kong)
 Cognito College (Kowloon)
 Confucian Tai Shing Ho Kwok Pui Chun College
 Creative Secondary School
 CUHK FAA Thomas Cheung Secondary School
 Daughters of Mary Help of Christians Siu Ming Catholic Secondary School
 Delia Memorial School
 Delia Memorial School (Broadway)
 Delia Memorial School (Hip Wo)
 Delia Memorial School (Matteo Ricci)
 Diocesan Boys' School
 Diocesan Girls' School
 ELCHK Lutheran Secondary School
 Elegancia College (Sponsored by Education Convergence)

“ I took part in the 1+1 Science Tip-top Talent Scheme and found being in a university laboratory exhilarating. From the microscope to the laminar flow hood, it was all so new, and now that I am at medical school the meta-analysis skills I learned are very useful. ”

Queenie Wong Hoi Wing, 17, Sha Tin Government Secondary School now at the Chinese University of Hong Kong

Evangel College
 Fanling Kau Yan College
 FDBWA Szeto Ho Secondary School
 Fortress Hill Methodist Secondary School
 Fukien Secondary School
 GCC&ITKD Lau Pak Lok Secondary School
 Good Hope School
 Hang Seng School of Commerce
 Heep Yunn School
 Helen Liang Memorial Secondary School (Shatin)
 HHCKLA Buddhist Ma Kam Chan Memorial English Secondary School
 HKCWC Fung Yiu King Memorial Secondary School

“ We asked if we could use Scratch for any subject. The answer was 'Yes!' Technicians can supervise if no teachers are available and we can run the Scratch programme anywhere, not only in classrooms. ”

Teachers at Marymount Secondary School

HKFYG Lee Shau Kee College
 HKMA David Li Kwok Po College
 HKMA K S Lo College
 HKMLC Queen Maud Secondary School
 HKSKH Bishop Hall Secondary School
 HKSYC & IA Chan Nam Chong Memorial College
 HKTA The Yuen Yuen Institute No. 1 Secondary School
 HKTA The Yuen Yuen Institute No. 2 Secondary School
 HKUGA College
 HKWMA Chu Shek Lun Secondary School
 Ho Fung College(Sponsored By Sik Sik Yuen)
 Ho Lap College(Sponsored By Sik Sik Yuen)
 Hoi Ping Chamber of Commerce Secondary School
 Holy Family Canossian School
 Holy Trinity College
 Hong Chi Lions Morninghill School
 Hong Kong Fanling Lutheran Secondary School
 Hong Kong International School
 Hong Kong Tang King Po College
 Hong Kong Teachers' Association Lee Heng Kwei Secondary School
 Hong Kong True Light College
 Immaculate Heart Of Mary School
 Jockey Club T1 College
 Ju Ching Chu Secondary School (Kwai Chung)
 Ju Ching Chu Secondary School (Yuen Long)
 Kau Yan College
 Kei San Secondary School
 Kiangsu-Chekiang College
 King Ling College
 King's College
 Kowloon Technical School
 Kowloon Tong School (Secondary Section)
 Kowloon True Light School
 Kwai Chung Methodist College
 Kwun Tong Government Secondary School
 Kwun Tong Kung Lok Government Secondary School
 L.S.T. Leung Kau Kui Primary School (Branch)
 Lai Chack Middle School
 Lam Tai Fai College
 Law Ting Pong Secondary School
 Lee Kau Yan Memorial School
 Ling Nan Secondary School
 Lions College
 Liu Po Shan Memorial College



Lock Tao Secondary School
 Lok Sin Tong Ku Chiu Man Secondary School
 Lok Sin Tong Leung Kau Kui College
 Lok Sin Tong Young Ko Hsiao Lin Secondary School
 Lok Sin Tong Yu Kan Hing Secondary School
 Madam Lau Kam Lung Secondary School of MFBM
 Ma Kam Ming Charitable Foundation Ma Chan Duen Hey Memorial College
 Ma On Shan St. Joseph's Secondary School
 Maryknoll Convent School (Secondary Section)

“ Throughout the competition I learnt a lot about science and technology. I also learned how to do good research and presentations. My team mates and I had our ups and downs but in the process we built up precious bonds and have irreplaceable memories. ”

Cordelia Chan, Carmel Secondary School, FLL award-winner

Marymount Secondary School
 MFBM Chan Lui Chung Tak Memorial College
 Nam Wah Catholic Secondary School
 Ng Wah Catholic Secondary School
 Ning Po No.2 College
 NLSI Lui Kwok Pat Fong College
 Norwegian International School
 Notre Dame College
 NT Heung Yee Kuk Yuen Long District Secondary School
 Our Lady of the Rosary College
 Our Lady's College
 P.O.H. 80th Anniversary Tang Ying Hei College
 P.O.H. Chan Kai Memorial College
 Pak Kau College
 PAOC Ka Chi Secondary School
 PLK 1983 Board Of Directors' College
 PLK C. W. Chu College
 PLK Choi Kai Yau School
 PLK Laws Foundation College
 PLK Lo Kit Sing (1983) College
 PLK Tang Yuk Tien College
 Pooi To Middle School
 Precious Blood Secondary School
 Pui Ching Middle School
 Pui Kiu College
 Pui Kiu Middle School
 Pui Shing Catholic Secondary School
 Pui Ying Secondary School
 Pui Ying Secondary School
 QuailEd College
 Queen Elizabeth School
 Queen's College
 Queen's College Old Boys' Association Secondary School
 Queen Elizabeth School Old Students' Association Tong Kwok Wah Secondary School
 Rhenish Church Pang Hok Ko Memorial College
 S.K.H. Bishop Baker Secondary School
 S.K.H. Lam Woo Memorial Secondary School
 S.K.H. Leung Kwai Yee Secondary School
 S.K.H. Li Fook Hing Secondary School
 S.K.H. Lui Ming Choi Secondary School
 S.K.H. Tang Shiu Kin Secondary School

S.K.H. Tsang Shiu Tim Secondary School
 S.W.C.S Chan Pak Shan School
 Sacred Heart Canossian School
 SALEM-Immanuel Lutheran College
 Sam Shui Natives Association
 Lau Pun Cheung School
 Sha Tin Government Secondary School
 Sha Tin Methodist College
 Snap Pat Heung Rural Committee
 Kung Yik She Secondary School
 Shatin Pui Ying College
 Shek Lei Catholic Secondary School
 Shun Lee Catholic Secondary School
 Shun Tak Fraternal Association Cheng Yu Tung Secondary School
 Shun Tak Fraternal Association Seaward Woo College
 Shung Tak Catholic English College
 Sir Ellis Kadorie Secondary School (West Kowloon)
 SKH All Saints' Middle School
 SKH Chan Young Secondary School
 SKH Li Fook Hing Secondary School
 SKH Lam Kau Mow Secondary School
 South Tuen Mun Government Secondary School
 St. Clare's Girls' School

“ On the memorable trip to Australia for the overseas tournament after we won in the local Hong Kong competition, we made great efforts to find an innovative solution and to build the robot. I learned how to cooperate with my team mates and discovered shared values and creativity. ”

Bosco Yau, Diocesan Boys' School, FLL award-winner

St. Francis' Canossian College
 St. Francis Xavier's School Tsuen Wan
 St. Joan of Arc Secondary School
 St. Joseph's College
 St. Joseph's College LEAD Club
 St. Mark's School
 St. Margaret's Co-educational English Secondary and Primary School
 St. Margaret's Girls' College, Hong Kong
 St. Paul's Co-educational College
 St. Paul's College
 St. Paul's Convent School
 St. Paul's School (Lam Tin)
 St. Paul's Secondary School
 St. Stephen's Girl's College
 Stewards Pooi Tun Secondary School
 T.W.G.Hs Kap Yan Directors' College
 T.W.G.Hs Li Ka Shing College
 Tack Ching Girls' Secondary School
 Tai Po Government Secondary School
 Tai Po Sam Yuk Secondary School
 Tak Oi Secondary School
 Tang Shiu Kin Victoria Government Secondary School
 The Chinese Foundation Secondary School
 The HKFYG Lee Shau Kee College
 The Hong Kong Taoist Association
 Ching Chung Secondary School
 The ISF Academy (Secondary Section)
 The Methodist Lee Wai Lee College

The Mission Covenant Church Holm Glad College
 Tin Shui Wai Methodist College
 True Light Middle School of Hong Kong
 Tsang Pik Shan Secondary School
 Tseung Kwan O Government Secondary School
 Tsuen Wan Government Secondary School
 Tsung Tsin College
 Tuen Mun Catholic Secondary School
 Tuen Mun Government Secondary School
 T.W.G.Hs Lui Yun Choy Memorial College
 T.W.G.Hs Mr & Mrs Kwong Sik Kwan College
 T.W.G.Hs Yau Tze Tin Memorial College
 United Christian College
 Wa Ying College
 Wah Yan College
 Wai Kiu College
 Yan Chai Hospital Lan Chi Pat Memorial Secondary School
 Yan Chai Hospital Law Chan Chor Si College
 Yan Chai Hospital No.2 Secondary School
 Yan Chai Hospital Wong Wha San Secondary School
 Yan Oi Tong Chan Wong Suk fong Memorial Secondary School
 Yan Oi Tong Tin Ka Ping Secondary School
 Ying Wa College

“ I do science and mathematics at school but it was only because of the Hong Kong Student Science Project Competition that I found out about problem-solving in technology and engineering. ”

Lam Kin-ho, 14, Confucian Tai Shing Ho Kwok Pui Chun College

Special Schools

C.C.C. Kei Shun Special School
 C.C.C. Mongkok Church Kai Oi School
 Caritas Jockey Club Lok Yan School
 Caritas Lok Kan School
 Caritas Lok Yi School
 Choi Lun School
 Chun Tak School
 Ebenezer New Hope School
 Evangelize China Fellowship Holy Word School
 Hong Chi Lions Morninghill School
 Hong Chi Morninghill School
 Hong Chi Morninghill School, Tuen Mun
 Hong Chi Morningjoy School, Yuan Long
 Hong Chi Morninglight School, Tuen Mun
 Hong Chi Pinehill No. 2 School
 Hong Chi Pinehill School
 Hong Kong Red Cross Hospital School
 Hong Kong Red Cross John F. Kennedy Centre
 Hong Kong Red Cross Margaret Trench School
 Hong Kong Red Cross Princess Alexandra School
 Mary Rose School
 Marycove School
 Po Leung Kuk Law's Foundation School
 Po Leung Kuk Mr. & Mrs. Chen Pak Keung Tsing Yi School
 Po Leung Kuk Yu Lee Mo Fan Memorial School
 SAHK Jockey Club Elaine Field School
 SAHK Ko Fook lu Memorial School
 Sam Shui Natives Association
 Lau Pun Cheung School
 Saviour Lutheran School
 Shatin Public School
 The Jockey Club Hong Chi School

“ It was very good for our students to do coding with students from mainstream schools. They learnt it by using the Scratch programme and then designing a game together. It was ideal for the physically challenged. ”

Teachers at Hong Kong Red Cross Princess Alexandra School

TWGHs Tsui Tsin Tong School
 TWGHs Kwan Fong Kai Chi School

Tertiary Institutions

Beijing University of Posts and Telecommunications
 Carnegie Mellon University
 Centre for Advancement of Chinese Language Education and Research, Faculty of Education, The University of Hong Kong
 Department of Architecture, The University of Hong Kong
 Department of Computer Science, The University of Hong Kong
 Faculty of Education, The University of Hong Kong
 Faculty of Social Sciences, The University of Hong Kong
 HKUST Connect
 Hong Kong Baptist University
 Hong Kong Polytechnic University
 Hong Kong University of Science and Technology
 Institute of Vocational Education
 The Centre for Information Technology in Education, The University of Hong Kong
 The City University of Hong Kong
 The Hong Kong Institute of Education
 The Hong Kong Institute of Vocational Education (Chai Wan)
 The Hong Kong Institute of Vocational Education (Kwun Tong)
 The Hong Kong Institute of Vocational Education (Morrison Hill)
 The Hong Kong Institute of Vocational Education (Tsing Yi)
 The MIT Club of Hong Kong



Collectively creative

Can anyone be creative? In this dialogue, Professors Allan Owens and Jeff Adams, Co-directors of RECAP (Research into Education, Creativity and Arts through Practice) at the University of Chester, say it is possible given the right environment.

After working in over a dozen countries including Japan, Finland and South Korea, the writers discuss creative approaches to teaching and learning. They say creativity is “a means to perceive differently, just as much as it is a means to do things differently. The type and means of creativity varies from practice to practice and from culture to culture.”

Are we all naturally creative?

Allan Owens The most popular current thinking is that creativity can be systematically developed, but actually most school systems in the world are educating us out of creativity rather than into it. We think that conducive teaching approaches let creativity flourish through unplanned activity whereas traditional teaching tends to provide a highly regulated environment focusing on individual attainment.

Jeff Adams The kind of creativity we are interested in results more from interaction than individual practice. It's quite different from the creativity one associates with the concept of singular genius.

Allan Owens One important distinction is between creative “high culture” and spontaneous or democratic forms of creativity. This is important for us because we reject associations with exclusive elitism that reserve creativity for the exceptional and the gifted. Instead, we explore the concept of creativity that includes the imaginative events and productions of all pupils and ordinary people.

“ Most school systems in the world are educating us out of creativity rather than into it. **”**





Can creativity be measured?

Allan Owens There has been growth in creative assessment and evaluation methods but we think there are ways in which creativity cannot be fixed for assessment purposes. Although most artists want to know if their ideas are connecting and working, fixing the criteria whereby their work is to be judged is not in their interest. The same would be true of the creative work of a scientist or any young person.

Jeff Adams For example, to walk around the Royal Academy looking at paintings with fixed criteria would be absurd so why should it be acceptable in schools? It is much more legitimate to talk, for example, of colours working particularly well in a particular situation.

“ *The main limits to creative learning in schools is the belief in data as a route to quality.* ”

Where does creative thinking come first?

Allan Owens Creative subjects and creative acts are commonly marginalized in state schools throughout the developed world. Teachers associated with creativity accrue less funds and frequently have less power. Many school managers put creativity low down in their priorities, and they are normally careful to ensure that the ethos of the institution remains conformist and obedient. This reflects the wider global interface between local communities and global capitalism.

Jeff Adams Nevertheless, the effect of one teacher working creatively should not be underestimated, particularly if he or she is backed by a supportive principal and governing body. Such a teacher can begin to build an environment for creativity. But it's not a question of simply the work of one teacher. In Scotland and Ireland for example, the school curriculum and teacher training are very different from in England, and creative practices appear to be much more visible. Elsewhere, in South Korea for example, where the intense, competitive curriculum has many casualties, being creative in education is seen as a possible panacea.

Room 13

This project, which began in Scotland in the 1990s, encourages young people of all ages to be creative and think for themselves. Students are free to pursue their own interests rather than a prescribed curriculum. They understand that they must not fall behind with their normal timetabled curriculum work and the responsibility for maintaining their work schedule rests with them rather than the teachers.

What are the limits to creative learning and teaching?

Jeff Adams Around the world, there are more similarities than differences in the challenges of embedding creative learning and teaching in schools. Restriction often comes from the pressures of external inspection and the need to conform in order to support the school organization.

Allan Owens The main limit to creative learning in schools is the belief in data as a route to quality. It assumes that all that is meaningful and important in education is amenable to measurement and that such a process will have nothing but positive effects. In fact, it is difficult to have a conversation with a serving educator who is not likely at some point to complain about the time, thought and energy that used to be devoted to teaching and care that now has to be diverted to bureaucratic tasks, most of which are orientated towards the metrics of performance, of both students and teachers. Teachers are encouraged on the one hand, to innovate, to take risks and foster creativity, and on the other, they are subject to heavy-duty accountability.

Room 13 has developed into an international network of young people engaged in creative activities, either as an adjunct to their traditional school studies or through independent workgroups. Its network has spread from Scotland to India, Nepal, South Africa and China, where a Room 13 can be found at the Zhong He School, Minghang district, Shanghai.

More details room13international.org/about/what-happens-in-room-13/

How can these tensions be resolved?

Allan Owens The resulting tension we have to live with but not be despondent about as we share the challenges, uncertainties and questions that emerge when we engage in creative practices and learning. We believe that the force of creativity is generated from little accomplishments and the belief that greater change can result from changing numerous small ways of doing things.

Jeff Adams For us, discussing the roles that creativity plays in education involves keeping the overarching context in sight, the liberating beauty that small, momentary events and long-term relationships permit, the belief that greater social change comes from numerous minor steps into action. ■

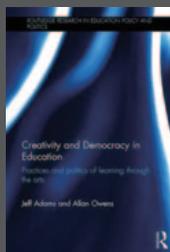


Allan Owens



Jeff Adams

Creativity and Democracy in Education: Practices and politics of learning through the arts



Taylor & Francis, 2016.
ISBN 978-0-415-74121-7

This new book by Jeff Adams and Allan Owens argues for the significance of the creative arts in the establishment of social justice in education, using examples drawn from Japan, South Korea, Finland, Scotland and Palestine.

***More information about the book and its authors**

online at Creativity and Democracy in Education
www.chester.ac.uk/departments/education/staff/jeff-adams
www.chester.ac.uk/departments/education/staff/allan-owens
www.chester.ac.uk/recap



Gender gap are we failing girls in STEM?

Raised in Hong Kong in the 1980s, Katherine Gudgin has worked in the ICT sector in Asia, Europe and Australia. She says gender stereotyping is alive and well and asks why so little is being done to change that.

Two years after university, my high-school computer technology teacher asked where I was working. When I told him I wrote for a computer magazine, the poor man didn't know what to say. In his defence, I wasn't your typical nerdy computer girl and after more than 20 years in the technology industry I'm still no techie geek. Neither are many other women in the industry.

Take Isis Wegner for example, hired as a 22 year-old digital platform engineer in 2015. She didn't conform to the classic stereotype either and the reactions of some of her colleagues were pretty shocking. She went online explaining why her looks and ethnicity had nothing to do with her job. The response was overwhelming. In a matter of days, tens of thousands of women across the STEM community had posted comments about their work and pictures of themselves. Clearly, the imagined "typical" STEM type does not exist.

Software engineers are not all young, white, hoodie-wearing males and STEM industries offer a huge range of opportunities to all sorts of people. They are constantly evolving and have roles for extroverts who like working with others and introverts who are happy talking to nobody. They do, however, have challenges. When I first started in the industry, women were a rarity outside marketing and HR. Today it's not much better as diversity figures released by some of the biggest tech companies show¹. Amazon has the highest percentage of women in technical positions with 37%, whereas Twitter and Yahoo tail the pack with 13% and 16% respectively.² In Asia the gender gap is equally bad. A Boston Consulting Group survey showed that although the ratio of male to female is roughly equal at high school science level, by researcher career level women account for only 14% of the workforce.³

I've worked with young women around the world on issues facing our industry and yet their talent remains hidden. A 2016 survey⁴ shows that one software repository approves code written by women at a higher rate than code written by men (78.6% vs 74.6%), but, and it is a big but, only if the gender of the coder is not known.

Given that so few women are in STEM and that 56% of them leave by mid-career according to a Harvard Business School survey,⁵ there is clearly an issue. If the product that they are delivering is good, why are we not doing all we can to make it attractive and easy for them to stay and thrive? ■



by Intel free press flickr/p/sgbWbA

What's stopping women in STEM?

By the end of 2016, fewer than 25% of posts in ICT in developed countries will be held by women – about the same or less than in 2015 according to Deloitte Global predictions. Here are some reasons.

Education

Some argue that girls are often steered away from science and math courses in primary school. Other experts say parents need to encourage girls' interest in science and technology before they go to school.

UK Only 17% of girls had learned computer coding at school, compared to 33% of boys.

US Only 18% of university computer science graduates were women, down from 37% in 1985.

Recruitment

UK Half of all companies hiring ICT workers said only one-in-twenty job applicants were from women.

Multiple countries Studies show that both men and women are twice as likely to hire a man for an IT job as an equally qualified woman.

Pay and promotion

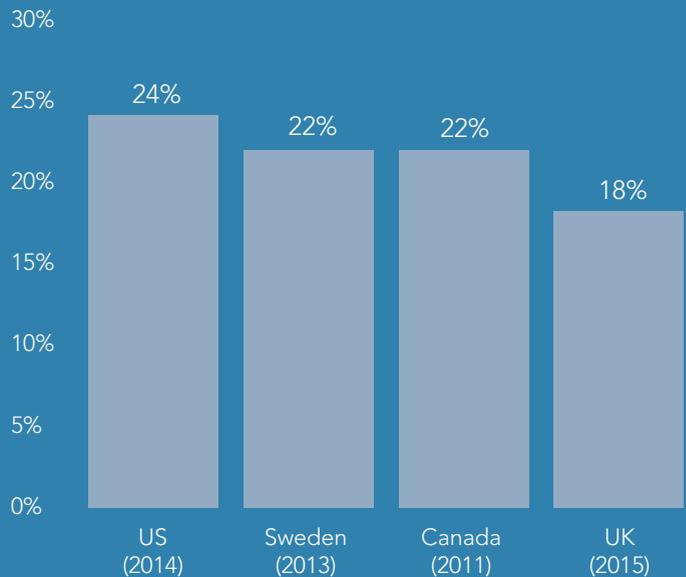
US female web developers earn about 20% less than men make for the same job.

India 45% of women feel stalled in ICT careers.

UK 37% of women in ICT say that they have been passed over for promotion because of their gender.

Source 2.deloitte.com/global/en/pages/technology-media-and-telecommunications/articles/tmt-pred16-tech-women-in-it-jobs.html

Women as percentage of total IT workforce by country for US, Sweden, Canada and UK



Source: The statistics for the chart above were obtained from government websites or documents. The US data is for 2014; Sweden data is for 2013; Canada is 2011 and UK data is for April-June 2015. See endnotes for information on sources

by Barefoot Photographers of Tlona flickr/p/78WdDK



One small step

For the first time in American history, half of the new class of NASA's astronauts was female this year. The four women studied robotics, space station mechanics, and other science courses. They are joining the first class ever to be trained for a future crewed mission to Mars.

The author recently launched a marketing consultancy in Hong Kong. In her spare time she is passionate about mentoring young women in the technology industry.



Sources

1. npr.org/sections/alltechconsidered/2016/02/03/465270938/intel-discloses-diversity-data-challenges-tech-industry-to-follow-suit
2. pxlrv.com/blog/diversity-of-tech-companies-by-the-numbers-2016/
3. asianscientist.com/2014/06/features/gender-parity-asian-science-tech-2014/
4. theguardian.com/technology/2016/feb/12/women-considered-better-coders-hide-gender-github
5. hbr.org/2016/09/what-it-will-take-to-keep-women-from-leaving-stem



Voting for change

The results of last month's US election came as a shock to many but they echoed sentiments expressed by the earlier Brexit vote. Looking at the effect of populism, student writer Mindy Li says our response should be to recognize the role we all play in our future.

When the US officially announced its 45th elected president, the nation was in turmoil. While some celebrated, other took to the streets to share their dismay. Hash tags like #notmypresident emerged and the amount of hate crime increased. Many had predicted the exact opposite result, while others pointed to the probability of Donald Trump winning once the Democratic Party endorsed Hillary Clinton rather than Bernie Sanders.

To understand the situation, it helps to look at the historical background. For decades after the two World Wars, a shift towards multilateral integration took place and international organizations were created whose work was to build a more unified world. This method seemed to work wonders for economic growth and development, but in recent years a strong resistance to globalization has emerged.

The argument against further advancement of globalization has centered on the loss of national sovereignty. The two starkest examples of the shift are the UK's referendum on leaving the European Union and the 2016 US election. While the Brexit debate questioned regionalism and immigration, the new US president won the race by responding to the demand for nationalism and the wish to "put America first."

This is the America that, at present, is the world's only superpower. It is labelled as the world's policeman. It has to uphold the standards it promotes but in recent years the fear of a diminishing sphere of influence surfaced. As China's economic growth has far surpassed expectations and Russia's policy of building international allies has proceeded, the result is that Americans feel they no longer have anything that could be labelled "the



greatest in the world." And therein lies the backbone of Mr Trump's campaign: to make America great again.

The country prides itself on its ability to inspire but its public needs a president who is able to deliver. It needs somebody who can fulfill promises to repair what is wrong and lead towards better times in future. Ms Clinton had better qualifications for the presidency, she won the popular vote – albeit by a small margin – and had support from her party. But on the day, the public voted for change. Mr Trump, even with his amateurish and confused campaign, still had more appeal for the majority of the voting American public.

We ask ourselves why so many people supported him and the reasons they had for doing so, given that his campaign was built on overt negative images, like racism, xenophobia and out-and-out sexism. One investigative journalist who has followed Mr Trump's career says that one reason was that he gave short, easy answers to complex unanswerable questions. The problem seems to be that the majority want precisely that.

Even while cradling the idea of white supremacy, Mr Trump publicly named the groups he considered to blame for America's decline. He might not be an inspiration but he said what people wanted to hear. The public



wanted answers and not politicians who elide the truth for fear of the impact it can have. His image was of a businessman who criticized the American government and its politicians for being corrupt, and despite his utterly erratic speeches, his simple words echoed the thoughts of millions and gave them names to blame. In response, the public united in protest against the establishment and for the protection of the national rights and identity.

Now people ask about the future. With Mr Trump as one of the most powerful men on Earth, how will he change the shape of that world and how will he affect the position of America in the global market. While one trusts that he will learn self-control when he is in office, one also hopes that he makes the most of his chance to unite a country that has been split in two. Most of all, one hopes that all the negative things he said during his campaign were said simply for dramatic impact, as a blatant strategy to gain popularity, and that they will fade away during his presidency.

In the span of six months, we have seen both the implications and flaws of democracy. The British referendum and the American presidential race were held in an atmosphere of divisive disapproval of the status quo. There are many parallels to be drawn between the two. In

the weeks following Brexit, there were petitions for a re-vote but the prime minister refused, declaring that a second vote would be disrespectful of the democratic system. Similarly in the US, in the aftermath of the election people refused to accept the results and criticized the electoral system. However, as democratic states we have to respect the effects of our structure and if there is injustice, then that is a matter to be addressed in a civilized manner.

Maybe the world will see a major change in terms of power and policy as more and more countries and their citizens see the negative side of globalization. What we know is that the next few years will be a bumpy ride and that we need every voice in our community to contribute thoughtfully and carefully to making our world a better place for all. ■

Mindy Li is a graduate of St Stephen's College in Hong Kong and is now majoring in International Studies at The College of New Jersey.



No cheer in youthful drinking

Stephanie Hung looks at how Hong Kong drinkers are getting younger amid calls for stricter alcohol licensing policies.

I was alarmed by the recent headline, “Hong Kong children drinking alcohol as young as 10, study finds.” This survey, by the Hong Kong Polytechnic University’s School of Nursing, found that children in the city are starting to drink at an average age of 10.9.¹

The report suggests many possible reasons such as peer pressure, stress at school, boredom or emotional pain due to problems at home or relationships² but the easy availability of alcohol is another significant factor.

I’m fairly sure that young people are not fully aware of the dangers of alcohol, but they risk suffering irreversible brain damage that could hamper their development. Underage drinkers are also 4.65 times more likely than non-drinkers to develop behavioural problems, such as skipping school or not doing homework, and they may have more trouble learning than their counterparts. Furthermore, as alcohol is a depressant, it has been suggested that drinking leads to suicidal tendencies.

This problem did not appear overnight. In fact, the Working Group on Alcohol and Health was established in June 2009 to advise on priorities for action. It published the “Action Plan to Reduce Alcohol-related Harm in Hong Kong”³ in October 2011 but even with such a comprehensive plan, it seems that not much has changed in recent years.

The Action Plan showed that while training and education about alcohol-related issues may raise awareness among the young, it doesn’t change their behaviour. Instead, it seems the best way to reduce consumption is to address the questions of accessibility and availability of alcohol and to conduct a review of pricing policies.⁴

In Hong Kong, although there are laws prohibiting bars and restaurants with a liquor licence from selling alcohol to under 18s under the Dutiable Commodities (Liquor) Regulations (Cap 109B), there is nothing to prevent them buying alcohol from retail or convenience stores.

This is a serious problem.

Lan Kwai Fong Association director Spencer Chan is among the people who are concerned. “Right now we’re talking seriously with the police about the underage drinking issue, but it’s also a legislative issue,” he said. “The dilemma is that we don’t have an ordinance or common law to restrict the sale of liquor to underage kids.”⁵

In May 2016, the Lan Kwai Fong Association sent a letter to the Liquor Licensing Board urging the Hong Kong government to impose liquor licensing laws on retail outlets. More than 100 establishments signed the petition. Yet again, no action was taken.





by William Murphy flickr/p/8aZgub



Hong Kong is falling behind its international counterparts. Among the 147 countries which provide information to the World Health Organisation about policies for control of alcohol, only around 15% had not set any restrictions on the minimum age for off-premises legal sale and consumption of alcohol.⁶

- In **Britain**, it is illegal to sell alcohol to anyone under 18, and to buy it if you are under 18.
- Similarly, in **mainland China** since 2006, it has been illegal to sell alcoholic beverages to anyone under 18, and for anyone under 18 to consume them.
- In **Singapore**, it is illegal for anyone under 18 to consume or purchase alcohol.
- The age requirement is stricter in the **US**, where it is illegal in all 50 states for people under 21 to buy or publicly possess alcohol, but see the statistics in the box below.

Although the Hong Kong government has banned sale of tobacco to minors, it has not enacted similar laws for alcohol. One must ask, “Why not?”

Many young people embark on excessive drinking sprees during festive occasions such as Halloween and the Rugby Sevens. These are times when youth workers have found underage girls drunk to the point of tears and boys throwing up on the streets. With Christmas and New Year’s Eve coming up, now is the time to take extra care to protect Hong Kong youth. ■

Stephanie Hung, a newly qualified barrister, is a strong believer in building a positive Hong Kong and a compassionate society. She also enjoys a glass of wine or two after a long day at work.



Not just Hong Kong

About 33% of American youngsters have had at least one drink by the age 15 and 90% of their intake is in the form of binge drinking. On the other hand, the Alcohol Education Trust in Britain found statistics showing that “In England, only 5% of 11-15 year-olds drink at least weekly (down from 20% in 2003) were “encouraging.” The proportion who have had an alcoholic drink increases from 6% of 11 year-olds to 72% of 15 year-olds.

Sources
pubs.niaaa.nih.gov/publications/UnderageDrinking/Underage_Fact.pdf
alcoholeducationtrust.org/teacher-area/facts-figures/

Sources

1. Cheung, E. “Hong Kong children drinking alcohol as young as 10, study finds.” South China Morning Post, 2 October 2016. scmp.com/news/hongkong/healthenvironment/article/2024468/hongkongchildrendrinkingalcoholyoung10study
2. Lanyon, C. “Underage drinking fuels worrying trend in Hong Kong, amid lack of regulation.” South China Morning Post, 13 May 2014. scmp.com/lifestyle/health/article/1511128/teenagebingedrinkinghkbecomingheadacheamidlackregulation
3. change4health.gov.hk/filemanager/common/image/strategic_framework/alcohol_action_plan/action_plan_e.pdf
4. change4health.gov.hk/filemanager/common/image/strategic_framework/alcohol_action_plan/action_plan_e.pdf
5. scmp.com/news/hongkong/healthenvironment/article/2024468/hongkongchildrendrinkingalcoholyoung10study
6. scmp.com/lifestyle/health/article/1511128/teenagebingedrinkinghkbecomingheadacheamidlackregulation
7. info.gov.hk/gia/general/201311/20/P201311200384.htm



the ancient game

by Ada Chau

When Google's AlphaGo programme beat the world's top Go player this year, interest in the game reached a new high worldwide. Gavin Lam, Managing Director of the Hong Kong Go Association, talks about its growing local popularity.*

Growing Go

Children as young as three years old can start learning to play Go. "I began when I was 8," Gavin remembers. "Although the basic rules are easy, I seldom managed to beat friends who had been playing longer than I had. At one point I thought I had plateaued and was quite discouraged but then I discovered the famous Japanese comic named 'Hikaru no Go' (棋魂) and my passion for the game took off again."

There are many possible variations although the goal is very simple, Gavin explains. "You must try to occupy a bigger area on the board than your opponent." The rules are complex and games can be very long. As the saying goes, "Even after thousands of years, no Go game will be exactly the same."

Go for creativity

Gavin learned Go with the Hong Kong Go Association. He now works there as a volunteer in his spare time, organizing courses for players at various levels.

"We are all volunteers there, doing what we enjoy most: introducing the game to children via schools, government agencies and private organizations."

Their efforts are not lost. More and more parents now take their children to learn Go. It can help develop creativity, planning and problem-solving, Gavin says, and that is in line with recent promotion in STEM education. "There are so many possible moves to make on the board, you have to think clearly about what you want to do, use your imagination and do fast mental arithmetic to make it happen, not to mention the patience and determination you need for long games and failures."

Still slow going

Despite growing interest, especially given the parallels with STEM education, there is not yet a market for professional players here. "Take me, for example. I love playing but going professional is nearly impossible," Gavin says regretfully. As with other sports, strong support from the commercial sector is needed to organize and sponsor professional competitions. However, in mainland China, South Korea



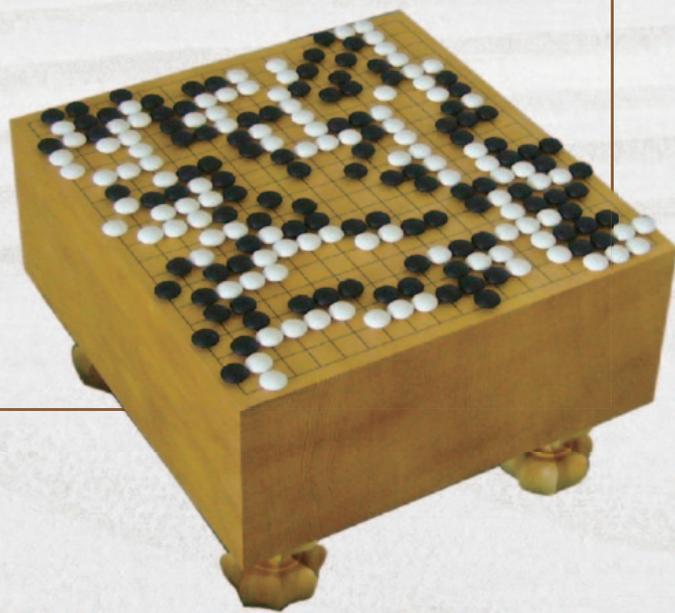
“ You have to think clearly about what you want to do, use your imagination and do fast mental arithmetic. ”

and Japan there are well-developed systems and support, so if talented young players in Hong Kong were to think of becoming professional, they could consider relocating.

Nevertheless, Gavin is optimistic and has many plans. “We already have a wide range of activities for all ages and new Go schools have been popping up recently around the city. Given the positive effect of AlphaGo and AI, I am sure that more and more people will realize what great fun the game can be and what multidisciplinary benefits it has. For sure, as standards here rise professional Go careers will become a reality.” ■

What is Go?

Go, a game for two, was invented in China about 4,000 years ago. It's famous for the abstract strategy needed to play well and they say it's good exercise for the brain! The name Go probably originated with the Japanese '碁' or igo. The aim is to use black and white “stones” to occupy as big an area as possible on the 19 X 19 grid board. Unlike in chess, there is no specific position for the stones at start of play. The player with the black stones goes first. Capturing an opponent's stones is one of the strategies and establishing dominant positions on the board is another. Although there are 361 positions on the board, they are seldom all used. Once the “territory” of each player is established and the final area occupied by each player has been agreed, the winner is declared and the game ends.



More about Go

Hong Kong Go Association www.hkga.org.hk

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Tel 2893 9157

Email info@hkga.org.hk

* AlphaGo: South Korea's world champion, Lee Sedol, played a historic match against Google DeepMind's AlphaGo computer programme in March 2016. AlphaGo won, the first time a computer had defeated a world class human player on even terms.



Peckish?

Print yourself a pizza!

Every sci-fi buff is familiar with the idea of machines that produce food at the touch of a button, but till recently the vision has stayed firmly in the realm of fantasy. Today, it is literally appearing on our plates.

In August this year a select group of London diners gathered for a “downloadable” nine-course meal, printed, live in 3D, by an international team of chefs, artists and technologists. They were at Food Ink, the world’s first 3D-print restaurant.

The printer in question extruded foods in the form of pastes and the multi-layered menu items were created with food such as potato, avocado, chocolate and passion fruit. Admittedly, creating the chewy texture of meat is more challenging for a printer.

Babies to seniors In Germany, Biozoon Food Innovations is exploiting the new technology by creating meals for people who find chewing difficult. The fresh ingredients are broken down into a paste and then printed onto a surface in the shape of the source ingredient: a chicken leg or sausage, for example. An edible adhesive is added to help the paste hold its shape Biozoon claims its products are already being eaten in more than 1,000 German senior citizen homes. The concept also has potential for baby food.

Printer to plate As in any 3D printer, material is pressed out through a print head onto a surface. A pump and nozzle are used to make shapes or lay down multiple thin layers. A user can create a graphic design on a computer then ask the printer to build up the shape layer by layer using the chosen processed food until it matches the required design. One benefit is that shapes are infinite as long as there is enough room for them to be built. This makes them ideal for the complex designs used in confectionery and cake decorations.

Transferring the concept to the fast food market, BeeHex has launched a 3D pizza printing company in New York. They say its developmental prototype prints an oven-ready pizza in practically any shape in under four minutes and its 3D printing kiosks can make and bake the pizzas in sixty seconds. BeeHex is also working on food for space missions [see box], while VTT Technical Research Centre, a fast food competitor in Finland, is already trialing vending machines that offer hot, 3D printed food for the ultimate takeaway experience.



by Yelp, Inc. flic.kr/p/qdp9CB

by naturalmachines.com/

Food for space

A NASA-funded project is studying how to make nutritious, efficient space food with a 3D-printer. It is exploring the feasibility of providing a wide variety of nutrient-stable foods while minimizing waste and saving time for space crews during long missions. The International Space Station already has a 3D printer but has yet to print its first food. Still, "3D printing provides dietary benefits as well," BeeHex says. "3D printing fit for space missions typically includes a personalized nutrition regimen that can be tailored according to each passenger's needs."

Source technewsworld.com/story/83264.html



▲ Foodini from Spain

Adding another element, there is the Foodini (pictured) which not only works with ingredients such as pureed vegetables and dough but also "prints a range of textures, including couscous (whole, not blended), burgers with chunks of walnuts and cranberries", according to Natural Machines, its Barcelona manufacturer.

Downsides and upsides To hold its shape, the food put into a 3D food printer needs to have a certain viscous consistency and can take some getting used to. Furthermore, even after your food is produced, you still have to cook it. For example, if you are printing a pizza, the printer will squeeze out the dough, cheese and tomato sauce, but it still needs an oven. And, finally, they don't come cheap. While not on the commercial market yet, the Foodini is expected to cost around US\$2,000, while commercial models might reach US\$10,000.

All those involved agree that 3D printers won't replace conventional cooking, but they do say the new technology offers the chance to control nutrition and texture to



by Electrolux Design Lab flic.kr/p/6RwwiA

▲ Coming one day to a kitchen near you

suit individual tastes and needs. So hang on to your pots and pans for now but keep an eye open for the gadget that takes your favourite flavour, gives it a light crisp on the outside, a fragrant creamy inner layer, and a heavenly centre titbit that melts in your mouth the way your grandmother's homemade pies once did. ■

3D food FAQs

Q: Why would I want to print food?

A: To replace convenience or packaged foods which have ingredients and additives you do not need; to save time creating dishes which require lots of assembly.

Q: How do I prepare my own ingredients?

A: By hand or with a blender or food processor.

Q: What types of foods print best?

A: Pasta dishes such as ravioli, gnocchi or spaghetti; burgers, pizza, hash browns; biscuits, crackers, brownies etc.

Q: How long does it take?

A: Some systems print foods in under a minute.

Q: How does the food taste?

A: The user prepares fresh food to go into the printer so, it's up to the user how the food will taste: fresh food in, fresh food out.



Coffee BREAK



“*Mmmnnn, lovely smell!*” Many people love the aroma of freshly brewed coffee. Elaine Morgan asks where it is grown, whether it is sustainable and how good is it for us.

Coffee is often grown in the mountains under the shade of trees. Over fifty countries including the Philippines, Papua New Guinea, Thailand, Vietnam and Indonesia produce it and the last two now rank among the world’s four largest exporters.

Traditional methods of coffee cultivation used to be passed down from generation to generation. Then synthetic pesticides, fertilizers, and increased market demand brought change. One change was the development of a hybrid that allowed coffee to grow in direct sunlight. Sun cultivation techniques have meant the clearing of forestry and the growing of coffee in rows as a monoculture with no canopy. Sun cultivated coffee creates the highest yield but it needs fertilizer and pesticides and that damages biodiversity.

Upcycling solution

Making and drinking coffee produces a lot of waste, so **Peann Tam**, co-founder of **Eco-Greenergy** responded by launching the **Zero Grounds Coffee Campaign**. She comments, “All cafes and offices which have facilities that produce coffee grounds are invited to participate and donate a proportion of proceeds to support food waste-related research. We launched the campaign with seed funds and entrepreneurship support from Youth Business Project, HKFYG’s JP Morgan STEP programme and an award from the HKFYG Social Innovation Challenge.



“Coffee NEXT” is the name-brand of the useful, attractive by-products made by Eco-Greenergy from up-cycled coffee grounds. Why not get some for the coffee-lover in your life, like the soap pictured here.

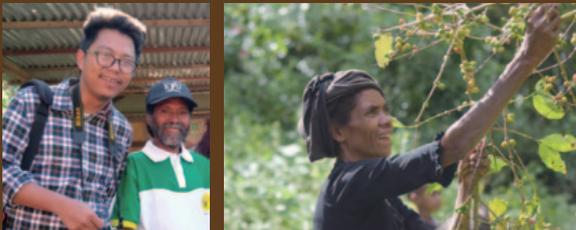
Eco-Greenergy is a social enterprise which specializes in delivering sustainable environmental solutions. **Christmas gifts can be ordered at eshop.eco-greenergy.com**



Sustainable alternative

Daneil Cheung is a participant in the HKFYG Belt and Road Backpacker's programme - an excellent opportunity to get in touch with a local community he says. He's the founder of travelerstores.com, a platform encouraging people to share stories and products they discover while travelling.

Daneil visited a coffee plantation in the mountains of Timor-Leste (East Timor) where he found the Hummingfish Foundation working with local producers of Maubere Mountain Coffee. Recalling his discovery Daneil says, "It is more than a fair-trade coffee and not only about the economic development of the village. It is about building up the post-war identity of the Timor-Leste farmers. Now, 14 years after the Indonesian occupation, they are still restoring their country and by restoring the coffee industry they also restore their sense of pride and happiness. That means much more than just a cup of coffee."



Shade grown coffee Maubere Mountain Coffee, can be bought online from hummingfish.org/projects/timor-leste-fair-trade-coffee-project/

Consumption of coffee in Asia has more than doubled in the last fifty years with Singapore leading the pack at 2.1kg consumed per capita each year. On a global scale Finland is way ahead, with an astonishing 9.6kg or over 2.5 cups a day per capita annually whereas whereas Hong Kong weighs in at just 1.3kg.

What about the supposed health risks attached to drinking coffee? Over the last couple of decades there have been all sorts of scares about caffeine but now a growing body of research shows that coffee drinkers, compared to nondrinkers, are less likely to have Type-2 diabetes, Parkinson's disease or dementia. There are also fewer cases of certain cancers, heart rhythm problems and strokes among coffee drinkers but sadly it hasn't been proved that drinking coffee can actually prevent any of those conditions.

The downsides? High consumption of unfiltered coffee (boiled or espresso) has been associated with mildly raised cholesterol levels and some studies reveal that two or more cups of coffee a day can increase the risk of heart disease in some people. Caffeine temporarily raises blood pressure but can't be blamed for chronic hypertension. Those with gastro-intestinal problems such as peptic ulcers should steer clear of caffeine which stimulates secretion of gastric acids and can make things worse. Doctors advise pregnant women not to drink too much coffee.

There's more good news though. It's been recognized as a stimulant for years and has been shown to be beneficial to asthma and migraine sufferers. It relaxes smooth muscle structures and acts as a bronchodilator in the same way as theophylline, which is actually one of caffeine's metabolites. Go easy though, the same relaxing chemical reaction takes place in the digestive system, which is why caffeine works as a laxative! Moderation in all things is the watch word! ■



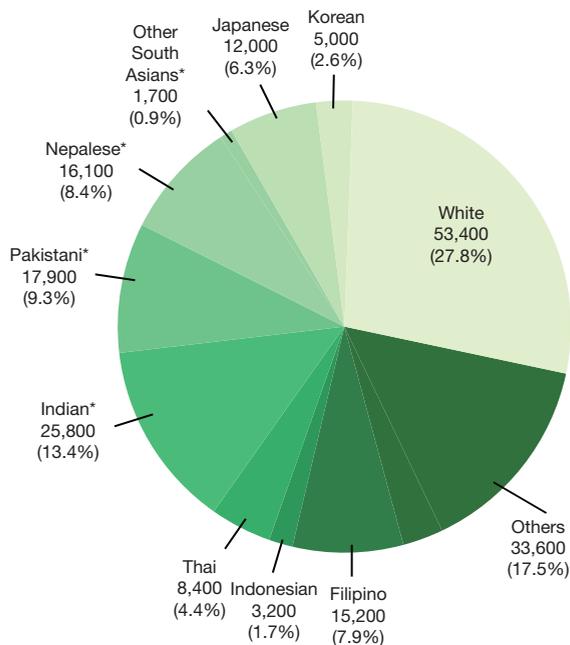


Hong Kong's South Asians hurdles for minority groups

Minority groups in Hong Kong suffer from exclusion and communication problems. This survey asks what is the way forward.

South Asians – including Indian, Pakistani and Nepalese people – make up over 30% of Hong Kong's ethnic minorities and are the largest such group, excluding foreign domestic helpers (see table). However, only about a third of respondents to this survey had any contact with them in the past year and almost two-thirds say they understand them poorly. Meanwhile, difficulties for South Asians learning Chinese, finding jobs and making friends with Chinese youngsters are common.

Hong Kong population of non-Chinese ethnic groups (Excluding foreign domestic helpers) 192,400



Note Foreign domestic helpers = 254,000

Source Census & Statistics Dept, HKSAR in Hong Kong Poverty Situation Report on Ethnic Minorities. povertyrelief.gov.hk/eng/pdf/2014_EM_Report_Eng.pdf

Comments

Better intercultural understanding and proficiency in Chinese are needed for ethnic minority groups to become fully integrated.

Justen Li Group convener “Contact with members of ethnic groups at intercultural festivals in places like Yau Tsim Mong and Yuen Long would help to decrease prejudice, improve attitudes and promote harmony.”

Calvin Lam Group member “Some Hong Kong Chinese people even think ethnic minorities are untrustworthy and that they exploit public benefits. Positive media coverage can reduce such negative stereotyping.”

Ronald Chan Group member “Practical, government-produced Chinese e-learning material at all levels should be widely available and the government should consider designing a Chinese language test specifically for minorities.”

Report No. 14 HKFYG Youth I.D.E.A.S.

Society & Livelihood group

Published title: “Challenges Faced by Ethnic Minorities in Hong Kong”

520 15-34 year-olds took part in a territory-wide random sample phone poll in July 2016.

Face-to-face interviews were held with 20, both Chinese and non-Chinese. Six experts or academic specialists were also interviewed.

Full details [in Chinese]

yrc.hkfyg.org.hk/news.aspx?id=084656a3-b57b-43d1-83a1-762d213c15d4&corpname=yrc&i=9591&locale=zh-HK

World Values Survey

The World Values Survey is a longitudinal, ongoing, international study covering about 100 countries. It indicates that Hong Kong people are more prejudiced against incomers than people in other countries. Here are some indicators.

What kind of neighbours do you not want?	People of different race	Speakers of other languages
Australia	5%	9.9%
Hong Kong	18.8%	16.2%
	10.5%	6.6%
	8.4%	10.2%
Taiwan	8.4%	7%
US	5.6%	12.9%

Source worldvaluessurvey.org/wvs.jsp



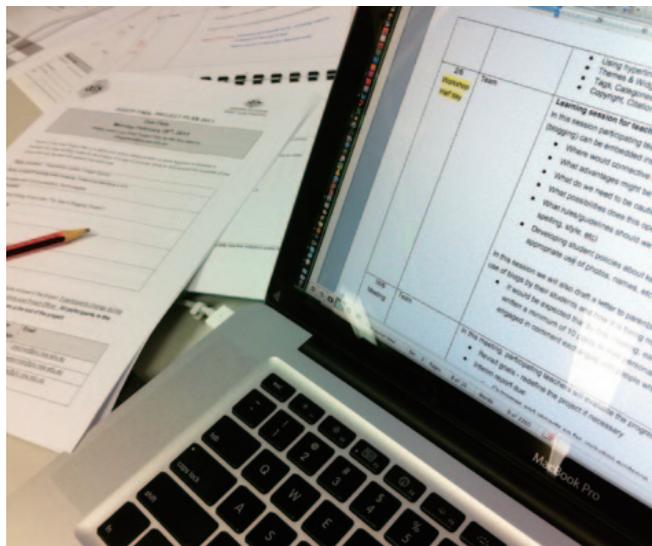
New challenges faced by civil servants

Civil servants face challenges. These include political pressure, gaining mutual trust with politically appointed officials and problems attracting talented recruits. What can be improved?

Respondents to this survey were asked to give views on certain questions using a scale of 0–10 points. They thought that civil servants encountered political pressure of an average severity level of 6.79 points. The severity level of failure to establish mutual trust with politically appointed officials stood at 6.31 points and to recruit talent at 5.83 points. Furthermore, respondents gave only 5.94 points for the performance of civil servants. Despite these findings, about 57% regarded a civil service job as ideal and 44% would join the civil service if they had the chance.

Who's in the Hong Kong civil service?

The civil service in Hong Kong is managed by 13 policy bureaux in the Government Secretariat and 67 departments and agencies, mostly staffed by civil servants. In June 2016, there were 165,526 civil servants excluding bureau heads of the Government Secretariat who are nominated by the Chief Executive and are not politically neutral career civil servants.



Comments

Given today's challenging environment, strengthening civil service responsiveness and enhancing public trust would be well worthwhile.

Richard Cheng Group convener “Young people acknowledge the roles and contributions of civil servants but we think trust in them among the public needs to be strengthened in today's changing political and social environment.”

Ray Poon Group member “The government should conduct regular opinion polls about public services with both civil servants and members of the public to provide solid evidence for improvement.”

Alan Lau Group member “The professionalism of civil servants is widely recognized so we would encourage the government and Hong Kong civil servants to ensure that standards are maintained.”

Sources

- hkupop.hku.hk/english/release/release1404.html
- censtatd.gov.hk/hkstat/sub/sp452.jsp?tableID=018&ID=0&productType=8
- en.wikipedia.org/wiki/Principal_Officials_Accountability_System
- info.gov.hk/gja/general/200204/17/0417251.htm

Report No. 15 HKFYG Youth I.D.E.A.S.

Group Governance & Constitutional Development

Published title: “Young People’s Views on Civil Servant Challenges”

523 18-39 year-olds took part in a territory-wide random sample phone poll in September 2016.

Twenty were invited for face-to-face interviews as were four experts or academic specialists.

Full details [in Chinese]

yrc.hkfyg.org.hk/news.aspx?id=5e608f3f-34a3-49d5-a900-bb8c93a52e05&corpname=yrc&i=9559



Physical Education benefits and motivation

The majority of secondary students polled enjoy PE and admit that exercise is good for them. Nevertheless, over half do no sports-related extra-curricular activities. What stops them?



Teenagers in general are often unwilling to take exercise and Hong Kong's hot, humid summer weather can be a disincentive. About 60% of the teens polled in this survey took high-intensity exercise – enough to raise breathing and heart rates significantly – once or twice a week on average whereas 76% took some form of moderate to vigorous exercise, such as stair-climbing, daily. Nevertheless, this survey found that 81.6% enjoyed their PE (physical education) lessons and nearly 42% thought it was good for stress-relief and 31.3% wanted longer PE lessons. Another significant finding was that only 49.5% took part in sport outside school hours or off school premises.

Comments

Sharing well-equipped government, school and club sports facilities would give a beneficial boost to young people's interest in sport, and longer PE lessons, of 100-120 minutes rather than the current 90 minutes, would be welcomed by students.

Alan Yip Group member “The research reveals that students like PE and want longer lessons so I suggest that the Education Bureau increases the recommended time allocated in the timetable.”

Derrick Fan Group member “Cooperation between government venues, schools and clubs would enable more sports participation given that many students have no suitably equipped facilities available to them.”

According to the findings of a Hong Kong Sports Commission report,* the US Indicators from the Center for Disease Control/US Department of Health and Human Services state that 13-19 year-olds should engage in physical activity at least three days a week for at least 20 minutes at moderate to vigorous intensity. The report's recommendations also included more organized activities for joint participation of parents and children and more team-based activities for youngsters. This is in line with the Federation's ongoing Community Team Sports (CTS) initiative, which encourages youngsters to participate in and organize sports-related community activities and volunteer projects. CTS also offers basic training with overnight camps, leadership camps and overseas exchange. Five team sports – basketball, ice hockey, canoeing, rope skipping and team running – are included. The 3-year project has funding from The Hong Kong Jockey Club Charities Trust and promotes not only physical and mental wellbeing through healthy exertion but also the improvement of physical skills and teamwork.

More details cts.hkfyg.org.hk

*sportscommission.hk/doc/archive/eng/papers/msec_sport4_2009sc9Study_annex1_e.pdf

Report No. 16 HKFYG Youth I.D.E.A.S.

Group

Education & Innovation group

Published title: “Attitude of Secondary Students on Physical Education”

520 Secondary 1-6 students took part in a territory-wide random telephone poll in October and November 2016. 42 students were invited to join five focus group interviews. Five academics, experts and athletes were also interviewed.

Full details [in Chinese] yrc.hkfyg.org.hk/news.aspx?id=7c5a61de-3d10-45fd-95e5-b0e38599663c&corpname=yrc&i=9587&locale=zh-HK



Hong Kong Youth Service Award 2016 Winners: Congratulations

These awards are open to 18-35 year-olds who are committed to serving others with dedication and integrity. Arnold Chan, Cheung Sai-ho, Bonnie Chiu, Jasmine Lau and Paul Lee are the five deserving award winners this year.



Arnold Chan's Teach4HK harnesses the power of young graduates to help him teach the underprivileged.

"What I remember best are the touching words from some of the young teachers' students." One said, 'I love Mr Chan's classroom. The atmosphere is great and he's always ready to help us.' Another remembered Ms Ng. 'I'm so grateful to her. She put in so much effort and was so patient with us even though we could be very noisy. She never gave up on us!'"



Cheung Sai-ho uses his computer skills to help disabled people at work. Always an innovator at heart, he doesn't let disability stand in his way.

"I developed an app for autistic children which they use to express themselves with photos and videos made on mobile phone and tablets. With high-end technology I can also sometimes help people achieve success in business. My goal is to improve quality of life for people with mental and physical disabilities and in future I will focus on health IT."



Jasmine Lau set up Philanthropy in Motion to provide resources, training and programmes for social enterprises and non-profit organizations. It enables her to bring out people's potential to give generously.

"The Hong Kong Youth Service Award has deepened my commitment to promote social innovation and philanthropy among young people. Because of the award, we have found new local and international partnerships and are now considering expanding to secondary school students."



Bonnie Chiu founded Lensational, a social enterprise that empowers women around the world, especially those from ethnic minorities, through photography.

"Since our feature in Youth Hong Kong* Lensational has garnered more support from people in Hong Kong. Not only have we trained more domestic workers from Indonesia and the Philippines, we have also worked with Pakistani adolescent girls and refugees in Hong Kong. They all shared their stories through the universal language of photography."



Paul Lee, a medical student, through his medical care initiative, Embrace with Empathy, takes the skills of his co-students out into the community. Over 13,000 people have already benefited.

"We hope to raise public awareness of health issues and provide free health checks. This gives medical students the chance to find out about serving their community, especially the elderly and the middle aged. We try to give gentle reminders about a healthy lifestyle and emotional support. Safeguarding health is the vision of all our volunteers."

More details ysa.hkfyg.org.hk

View Video at ysa.hkfyg.org.hk

***Note** The feature with Bonnie Chiu appeared in the March 2014 issue of *Youth Hong Kong*.

Correction: Youth Hong Kong September 2016, page 50.

The upper right photograph is of **Carrie Tang** who founded **DreamMag** to publish young writers. She also realized a childhood dream to set up a café employing the deaf to enable their better integration.

Use your mobile phone to download the "WedCam" app and try the AR feature kindly provided by Create Studio



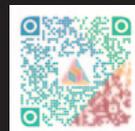



Congratulations! HSBC Youth Business Award Winners 2016

These awards acknowledged five young companies for their proactive, innovative services.

Giving recognition to exceptional startups is the goal behind these awards which also offer their founders a platform for exchange to enrich their business acumen. The annual awards also acknowledge the contribution made by young business enterprises to Hong Kong's economy and encourage entrepreneurial culture.

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Twiggly Chan



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Full details

ybhk2.hkfyg.org.hk/ybaward2016/en/announcement/dinner.php

Enquiries

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Original story by Zhang Jiajia

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The title of this journal in Chinese is *Xiang Gang Qing Nian* 香港青年

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