

Stanford Academic Talent Search University 2004 EPGY



Supporting
Organisations:



InfoKidsSM
資訊小博士
www.infokids.com.hk


HKedCity
香港教育城有限公司
www.hkedcity.net

What is the Stanford EPGY Academic Talent Search 2004?

The Stanford EPGY Talent Search 2003, designed and organized by Stanford University Education Program for Gifted Youth, to

1. identify gifted students in Hong Kong with exceptional mathematical abilities and
2. recommend these students to join gifted programs to enable them to learn at a level and pace most appropriate to their abilities to prepare them ultimately to take Stanford University level courses during their high school years

was first successfully administered to over 800 mathematically precocious students from over 80 schools in Hong Kong in February 2003(<http://www.infokids.com.hk/TalentSearch03/talentsearch.htm>)

Stanford University EPGY shall administer the **2004 Academic Talent Search** in Hong Kong supported by InfoKidsSM, the English Language Teaching Unit of the Chinese University of Hong Kong and HKedCity on January 18 2004 to identify students academically gifted in either

- ❖ **mathematics** aged between 7 and 13 or
- ❖ **writing** (in the English language) aged between 12 and 16.

Who is eligible?

Students whose age meet the above criteria and scoring within the top 5% in either mathematics or English Writing in their grades may apply to participate either through the nomination of their schools or their parents.

What benefits will students, parents and schools receive?

The EPGY Academic Talent Search 2004 aims to

1. help students, parents and schools better understand the individual student's abilities. The Talent Search gives these top students a chance to take the Stanford Aptitude Test designed to bring the very best out of their abilities.
2. reveal more about their abilities by providing an analysis report on the student's aptitude . The report is to be generated by Stanford University EPGY.
3. compare the student's results with other equally highly able students in the same age group in Hong Kong and around the world.
4. recommend options and opportunities in EPGY programs in Hong Kong during normal school terms or at Stanford University during the summer
5. reward successful students with recognition of their outstanding achievements.
6. provide the opportunity for teachers from participating schools to attend a workshop on English Writing in March 2004



Stanford University's Education Program for Gifted Youth

Stanford University EPGY courses grow out of over 40 years of extensive research at Stanford University and are offered exclusively at InfoKids in Hong Kong. They allow gifted students to take courses suitable to the level of their ability, regardless of the availability of such courses locally, and in a way that is minimally disruptive to the rest of the student's school experience. With these courses schools can meet the educational needs of their most advanced students without having to hire special instructors to teach courses to small numbers of gifted students.

EPGY courses are structured on computer based learning mode. In Hong Kong a real classroom learning environment is administered at InfoKids to allow greater interaction between students and their tutors and amongst the students themselves. The real classroom is supplemented by a virtual classroom over the internet where more difficult topics receive additional attention and explanation.

Courses offered by InfoKids to high ability students in **elementary**, **middle** and **high** schools are:

- **Mathematics**

Primary:	M00A (K-2)	M00B (3-4)	M00C (5-6)
Secondary:	M00d (7-8)	M011 (Honors Beginning Algebra)	
	M012 (Honors Intermediate Algebra)	M013 (Honors Pre calculus)	
	M015 (Honors Geometry)	M040\41\42*(Calculus A,B,C)	
● Physics	P010 (Introductory Physics)	P051* Mechanics	P053* Electricity and Magnetism
● Writing	W009 (Elementary Writing)	W010 (Intermediate Writing)	
	W011 (Fundamentals of Expository Writing)	E001*(Expository Writing)	
	EG20 (Grammar Review)		
● Programming	C11A (Intro to C Programming)	C015(Java Programming)	

*Advanced Placement Level courses

Students who score within the top 5% of their grade will be eligible to take a Stanford Aptitude Test at InfoKids the results of which will be used as a yardstick for admission.

The EPGY Courses

EPGY courses use state-of-the-art computer based multimedia technology. The software presents lectures consisting of digitized sound and synchronized graphics that appear on-screen in the manner in which a teacher would present material in class. In Hong Kong, lectures will also be delivered in the Chinese language to assist in understanding.

Lectures are followed by on-line computer exercises, which range from quizzes, in which students answer questions, to interactive expositions in which students are led through detailed material step by step while being asked questions about it. Mathematics courses also include derivation exercises, in which students construct proofs within a symbolic computation environment. The EPGY software analyzes each student's results on these exercises and requires that the student display mastery of the subject before advancing in the course. By using sophisticated data collection and analysis techniques via email and the internet, the software allows instructors to keep detailed records of the individual progress of each student.

All EPGY courses include elements away from the computer. In the mathematics and physics courses students are required to complete exercises from an accompanying textbook and to take regular off-line chapter examinations. The writing courses include substantial off-line reading and essay writing.

EPGY courses are designed with gifted students in mind. Students are never forced to sit through exposition of material that they already understand. Moreover, courses are individualized so that fast learners can proceed quickly through material while slower learners will receive additional instruction.

The Virtual Classroom

The Virtual classroom is a tutorial session which provides a live interactive environment in which students and their InfoKids / Stanford instructor can talk to each other and write on a common whiteboard via the internet. In the virtual classroom students have a chance to ask their own questions on concepts and to hear what other students have to say in addition to discussion and explanation of more difficult topics.

Course Credit

Students who complete EPGY courses at InfoKids will receive a certificate jointly signed by InfoKids and EPGY. EPGY instructors will work with InfoKids instructors to determine grades for each student. For courses at the Advanced Placement level and beyond¹, EPGY instructors shall then be providing direct instructions via the virtual classroom and students upon completion of courses receive a transcript from the Continuing Studies Program at Stanford University whereby acquired credits will be applied towards undergraduate studies at Stanford University.

Enrolment

Eligibility: Students aged between 5 to 17 and scoring within the top 5% within their grade (for the related Mathematics, English or Physics subjects)

Requirements: (1) fill in and submit the following application form and
(2) a photocopy of the latest school report
(3) sit and pass the Stanford Aptitude Test

Fees: (1) Application fee for the Stanford Aptitude Test is HK\$280
EPGY course fee is HK\$3,000 per quarter {or US\$450 (Maths); US\$ 575 (English) if tutoring is direct from Stanford} paid on a quarterly basis (an average student may take up to 3 quarters to complete one course)

Questions can be directed at InfoKids 2504 2228

Web: <http://www.infokids.com.hk> email: epgy@infokids.com.hk

* An additional HK\$150 per quarter being licence fee for Maple shall be charged for courses M011 or above.

¹ University level courses: **Linear Algebra; Multivariate Calculus; Differential Equations; Complex Analysis ; Modern Algebra; Real Analysis; Point-set Topology; Number Theory ; University Logic; Light and Heat; Modern Physics**