第8期
Issue No.8
11月 NOV 2017

The 8th issue of *Gifted Gateway* has been released with contents covering corporate message, the learning opportunities in the HKAGE, a research sharing on "Study on How Gifted Students Conduct Their Independent Enquiry Studies (IES) of Liberal Studies (LS)", Gifted File and the forthcoming student events from December 2017 to March 2018. We hope this quarterly e-newsletter can provide student members, parents, educators and people who are interested in gifted education with a source of information and we sincerely wish that this will facilitate student members' applications for our programmes.

Corporate Message

Launching the STEM Programmes Catering to the Changing Needs

The Hong Kong Academy for Gifted Education (HKAGE) always progresses with the times. Following the "Gifted Education Programme Overview" which introduced our programmes to over 170 parents, the HKAGE will roll out more STEM-focused courses and programmes next year, with the aim to provide special learning experiences to our student members.

To name a few, the "Big Data Programme", hosted in Hong Kong for the first time, will teach students the potential of big data in changing the future by studying and collecting big data, as well as analysing its impacts on the academia and businesses. Besides, to address the extreme climate changes in the 21st century and the global energy crisis, the HKAGE will work hand in hand with The City University of Hong Kong to organise the "Solar Electric Car Programme", which will instruct student members to create their own solar electric cars. The programme will also encourage them to investigate how the use of renewable energy can reduce energy consumption and carbon emission so as to cope with climate changes.

In addition, the HKAGE will join hands with scholars from The Hong Kong University of Science and Technology, Aarhus University, and University of Illinois at Urbana-Champaign to establish the "Think Like a Scientist" education task force. The team will hammer out the structure and education mode for new science programmes targeting senior primary and junior secondary students. Looking ahead, the HKAGE will infuse the programme-planning experience of different regions into new science programmes to facilitate the local education reform.

Learning Opportunities in the HKAGE

We offer high quality and challenging programmes and services to students in different learning areas. We would like to feature a past programme by Senior Student Club and an upcoming programme on Big Data by Academic Programme Development Division in this issue.

Past Programme Highlight

Senior Student Club Orientation Programme on 24 September 2017

To enhance interaction among student members, the newly established Senior Student Club (SSC) of the Hong Kong Academy for Gifted Education (HKAGE) held an orientation programme on 24 September. The committee members kicked off the event by introducing the structure of SSC. We also arranged a well-received Q&A game with the use of mobile phones to let student members gain a better understanding of the HKAGE.

And of course, group games and the long-expected city hunt were on the programme list. This time, city hunt covered the HKAGE building, Shak Kok Estate and Shatin Town Centre. Under the lead of the committee members, the participates finished four learning-domain-related games inside the HKAGE building. Tasks in the games touched on Humanities, Leadership, Science and Mathematics topics. Besides, student members had to walk around the district and complete challenges that put their concentration ability, sense for current affairs, confidence, collaboration and communication skills to the test. Through the games, participants could learn new things, and at the same time, the challenges would facilitate whole-person development, encouraging student members to learn from each other and unleash their talent in the groups.

The bad weather on that day did not dampen the passion of the participants. Every one of them gave their best, not only winning the games, but also making good friends. The orientation programme was critically acclaimed, giving the SSC a shot in the arm. We would like to thank the HKAGE and the student members for their support and will keep it up to organise more exciting activities. Look forward to your participation!

Upcoming Programme Promotion

Programme Title: Big Data- Reality and Revolution

Big Data is often talked about, but what does it do in real life? Web data collection is transforming marketing and economic production while massive genomic databases are transforming medical research. Besides, text mining brings changes to the study of humanities. Meanwhile, merged databases of administrative records increase the potential for both greater

social understanding and reduced privacy. New technological tools and approaches are required to handle massive data arrays in physics and astronomy. In business, large databases collect information in real time and are mined for instant decision-making, such as credit card fraud detection which requires speed and accuracy. What unique challenges in statistical methodology and computing does Big Data bring? What are the tools of this new trade and what are the traps and tricks of Big Data Analytics? What kinds of jobs and careers are being created in Big Data fields, and what skills and educational background do they require?

The HKAGE is going to launch a Big Data programme - "Big Data- Reality and Revolution" in December.

In this programme, student members will explore the impacts large-scale data collection and analytics have on academia and businesses. They will also learn how to use the R software and conduct Big Data Analytics with it. Finally, they will understand the reality and the potential of Big Data for transforming our collective future.

Research Sharing

Study on How Gifted Students Conduct
Their Independent Enquiry Studies (IES) of Liberal Studies (LS)

Introduction

Independent Enquiry Study (IES) is adopted as the mode of school-based assessment (SBA) for Liberal Studies (LS). Each student is requested to complete IES for LS within the period of Secondary 4-6. Finally, the student's performance in IES would be assessed by the student's own teacher and contributes towards his/her final LS result in the Hong Kong Diploma of Secondary Education (HKDSE) Examination (i.e. 20% of the total weighting of final LS result).

Recently, the Research Division of the HKAGE has conducted a study which aimed to investigate the learning experiences of gifted students when completing their IES. From in-depth interviews with gifted students, the gifted student's characteristics during the period of conducting IES were explored.

Study Design

Semi-structured interviews were conducted with six student members of the HKAGE. They were invited to attend a 1.5-hour individual interview. Their performance levels in LS ranged from mid to high levels. Besides, in order to compare the differences between gifted students and 'general' students, six non-HKAGE students from a secondary school were purposefully selected for a focus group interview. The public exam results of this secondary school were more or less on the average level. The performance of these six non-HKAGE students in IES spread equally into three broad groups (2 high-level, 2 medium-level and 2 low-level) based on the assessment information provided by their teachers. Basically, the interview questions were organised by the three IES stages: 1) Project proposal; 2) Data collection and 3) Product. The interview questions for each of the stages cover similar areas but tie to the work underway. Students were asked to describe their investigations, interactions with teachers and their views on some relevant matters and arrangements (e.g., marking process). Furthermore, in order to triangulate the research results, one experienced LS teacher was invited to facilitate the study and provided his views about general characteristics of a common student when conducting his/her IES for the sake of comparison.

All the interviews were taped, transcribed, and analysed using a thematic approach. Additional information was collected (e.g. the final products of their projects, final IES score and LS grade of HKDSE) as supplementary information about their IES process and outcomes of these six gifted participants.

Findings

The findings on the differences between student members in the HKAGE and 'general' Hong Kong students were summarised in the table below.

HKAGE Students	'General' Students
(i) Abilities and Commitment	
- They had higher abilities and could complete their IES within a short period of time	- They had to spend more time to complete their IES, especially those with average or below average level of abilities
(ii) Information Sources and Quality of Work	
- Some of them did address the representativeness of samples/ information by collecting them from various sources	- They usually collected information from limited sources and average-level/ low-level students even could not discern the problems of representativeness
(iii) Ethics and Values	
- All of them showed reluctance to make up the data and sample sizes	- A number of them did attempt to make up the sample size and/or the data
(iv) Interactions with Relevant Parties	
- Their interactions with teachers were quite limited, usually about some minor points; e.g. changes of wordings, question order - They usually completed tasks on their own	- The average/low level students need more guidance and interactions with teachers and their classmates
(v) Views on Relevant Matters and Arrangements	
- A number of them showed understanding of the pedagogic values of conducting IES - With respect to certain limitations in the arrangement (e.g., possible variation in marking standards amongst different teachers in a school), most of the gifted participants could understand the limitations, and accept and compromise to a certain extent	- Most of them did not recognise the pedagogic values of conducting IES - Most of them did not show understanding of the limitations (e.g., possible variation in marking standards amongst different teachers in a school) and simply trusted the school's arrangements

Discussion

As pointed out by the LS teacher, one of the aims of IES is to build connections between students' studies and their daily lives so that they could polish their thinking skills, argumentation and communication skills in expressing and sharing their views and concerns on the issues about their own communities with others. From

the study on our gifted student members, it seems that not many of these objectives could be materialised. In this regard, the Academy could provide the chances of interactions, sharing and collaboration with others, and building connections with students' local communities (e.g., bring small but tangible changes in their local communities) when designing and providing services and programmes to our student members, in addition to enhancing their knowledge and skill sets.

Gifted File

Comics created by Mr Jimmy Wong, Affective Education Division

1) This story illustrates the problems facing gifted student Ho Yin

2) His mother had high expectations of him

3) Ho Yin didn't utter a word of complaint and tried to live up to the standard

4) However, his mum had a "Tiger Mother" mindset

5) She was confident in Ho Yin's abilities

6) but still worried about his future

7) She hoped that Ho Yin could survive the challenges in society

8) Under the pressure from his mum, Ho Yin suffered from health issues

9) He had worked much harder for the test than his classmates

10) but fell ill before the test due to great stress

11) His condition raised concerns of the school

12) Finally, Ho Yin felt better after receiving counselling service

Recommendations from Affective Education Division

The case of Ho Yin illustrates how pressure causes physical discomfort, which is not uncommon and happens from time to time. However, we often mistake it for a physical problem and neglect the psychological factors behind.

In fact, Ho Yin suffered from a psychosomatic disorder which is incurred by psychological, emotional and environmental factors. Both adults and children can fall victim to this condition.

When under pressure, the automatic nervous system, hormone secretion system and immune system of the human body will make necessary adjustments to cope with the external environment. When the stress is gone, the body systems will resume normal operation. However, if we are overwhelmed by tremendous pressure or under stress for a long time, our body may overreact, leading to physical disorders or even psychosomatic symptoms such as headache, stomachache, abdominal pain, nausea, vomiting, diarrhea, polypnea, rapid heartbeat and frequent urination. As medications could not help to relieve all the symptoms, psychological intervention is necessary for a full recovery.

In most cases, gifted students are stressed out as they are self-demanding or bear the heavy burden of expectation without appropriate support.

Although parents of gifted students understand that "giftedness" doesn't mean excellence in everything, they couldn't help expecting more from their children under the influence of others. As a result, parents unconsciously put pressure on their kids.

As supporters of gifted children, parents should find out the source of pressure and help their children relax. They should also pay attention to their own behaviours to avoid putting stress on their kids.

Forthcoming Student Programmes and Events in December 2017 to March 2018 (Free of charge)

Date	Programme/ Event	Target Participant (HKAGE student members)
Humanities (Primary)		
16 22 29 Dec2017, 6 Jan 2017 2:00 p.m. - 5:00 p.m.	Reading and Writing II Course (Level 2): Between the Lines - Critical and Creative Reading of Short Fiction (ELLP1252) Application (Language: English)	P.4 – P.6
Humanities (Secondary)		
30 Dec 2017 6, 13, 20, 27 Jan 2018 3 Feb 2018 9:30 a.m. – 12:30 p.m.	Global Citizenship I Course (Level 4): International Relations and Modern Word (HUMS2570) Application (Language: English)	S4 – S6
20&27 Jan,3&10 Feb2018 2:30p.m.-5:30p.m. 24 Feb,3 Mar 2018 9:30a.m.-12:30p.m.	Modern and Contemporary Literature III Course (Level 4) : Modern Chinese Literature (CLLS2151) Application (Language: Cantonese)	S4 – S6
21 Jan 2018, 3, 10, 14, 21, 24 Feb 2018 9:00a.m. – 12:00n.n.	Chinese Philosophy I Course (Level 2): Applications of Chinese Philosophy in Modern Life (HUMS1321) Application (Language: Cantonese)	S1 – S3
16, 23, 30 Dec 2017, 6 Jan 2018 2:00 p.m. – 5:00 p.m.	Big Data Course (Level 5): Big Data - Revolution and Reality (MULS3001) Application (Language: English)	S1 – S6
Mathematics (Primary)		
22,23,29 & 30 Dec2017 ,6 Jan 2018 9:00 a.m. – 12:00 n.n.	Geometry and Topology Course (Level 1): Line, Angle, Shape and Geometrical Construction (MATP2312) Application (Language: Cantonese)	P4 –P6
13,20 & 27Jan, 3 Feb 2018 9:30 a.m. – 12:30 p.m.	Across Domains and Interdisciplinary Course (Level 1): Creative Geometry with GeoGebra (MATP1331) Application (Language: Cantonese)	P4 –P6

20, 27 Jan ,3 &10 Feb 2018 9:30 a.m. – 12:30p.m.	Discrete Math, Probability, Statistics Course (Level 1): Probability paradox (MATP2522) Application (Language: English)	20, 27 Jan ,3 &10 Feb 2018
10, 17,24 Mar & 7 Apr 2018 9:30 a.m. – 12:30 p.m.	Discrete Math, Probability, Statistics Course(Level 1)：Statistics Around Us（MATP1711） Application (Language: Cantonese)	9:30 a.m. – 12:30p.m.
Mathematics (Secondary)		
2, 9, 23, 30 Dec 2017 2:00 p.m. – 5:00 p.m.	Analytical Study Course (Level 2): Quadratic Functions and Standard Conics (MATS2610) Application (Language: Cantonese)	S1 – S3
16, 23, 30 Dec 2017, 6 Jan 2018 2:00 p.m. – 5:00 p.m.	Big Data Course (Level 5): Big Data - Revolution and Reality (MULS3001) Application (Language: English)	S1 – S6
6 Jan 2018 Aptitude Test 24 Feb, 3, 10, 17 Mar 2018 2:00 p.m. – 5:00 p.m.	Maths Ignition – Coordinate Geometry (MATS2115) Application (Language: Cantonese)	S1 – S3
21, 22 Feb 2018 9:00 a.m. – 5:00 p.m.	HK Winter Mathematics Olympiad 2018 (MATS1100) Application (Language: Cantonese)	S2 – S6
24 Feb, 3, 10, 17 Mar 2018 9:00 a.m. – 12:00 n.n.	Geometry and Topology Course (Level 2): Conics (MATS2340) Application (Language: Cantonese)	S1 – S3
2 Dec 2017 10:30 a.m. – 12:00 n.n.	Mathematics Talk: The Power of e (MATT3900) Application (Language: Cantonese)	S4 – S6
10 Mar 2018 2:00 p.m. – 3:30 p.m.	Mathematics Talk: Congruency and its Application (MATT3300) Application (Language: Cantonese)	S1 – S6
Sciences (Primary)		
21 and 22 Dec 2017 10:00 a.m. – 1:00 p.m. 2:00 p.m. – 5:00 p.m.	Forensic Science Course (Level 1): Crime Scene Investigation (SCIP2321A) Application (Language: Cantonese)	P4 –P6
Sciences (Secondary)		
23, 27, 28, 29 Dec 2017 2:00 p.m. – 5:00 p.m.	Intermediate Course in Computer Game Design: Design and develop your digital game with Construct 2: Design and develop your digital games with Construct 2 (TECS2431) Application (Language: English)	S1–S3
16 Dec 2017 9:00am. – 12:00 n.n. 23 Dec 2017 9:00am. – 12:00 n.n. 30 Dec 2017 9:00am. – 12:00 n.n. 6 Jan 2018 9:00am. – 12:00 n.n.	Big Data Course (Level 5): Big Data - Revolution and Reality (MULS3001) Application (Language: English)	S1–S6
27, 28, 29, 30 Dec 2017 9:00 a.m. – 12:00 n.n.	An Inspection of Airplane Design (Re-Run) (TECS1321A) Application (Language: Cantonese)	S1–S3
Leadership (Primary)		
18 Nov 2017 10:00 a.m. – 12:00 n.n.	Leadership Talk: Global Inclusive Leadership Next Generation Programme (LEAT1182) Student member Application, Alumni Application (Language: English)	P4-S6, Alumni
16 Dec 2017 9:30 a.m. – 12:30 p.m. 23 Dec 2017 9:30 a.m. – 3:30 p.m. 6 Jan 2018 9:30 a.m. – 12:30 p.m. 13 Jan 2018 9:30 a.m. – 4:30 p.m. 20 Jan 2018 9:30 a.m. – 12:30 p.m.	Leadership Explorer Course (Level 1): Adaptive Leader (LEAP1121) Application (Language: Cantonese)	P6 – S4
Leadership (Secondary)		
18 Nov 2017 10:00 a.m. – 12:00 n.n.	Leadership Talk: Global Inclusive Leadership Next Generation Programme (LEAT1182)	P4-S6, Alumni

	Student member Application, Alumni Application (Language: English)	
27 Dec 2017 Lecture: 9:00 a.m. – 12:00 n.n. Tutorial 1: Group A 2:00 p.m. – 4:00 p.m. Group B 4:00 p.m. – 6:00 p.m. Group C 7:00 p.m. – 9:00 p.m. 28 Dec 2017 Lecture: 9:00 a.m. – 12:00 n.n. Tutorial 2: Group B 2:00 p.m. – 4:00 p.m. Group C 4:00 p.m. – 6:00 p.m. Group A 7:00 p.m. – 9:00 p.m. 29 Dec 2017 Lecture: 9:00 a.m. – 12:00 noon Tutorial 3: Group C 2:00 p.m. – 4:00 p.m. Group A 4:00 p.m. – 6:00 p.m. Group B 7:00 p.m. – 9:00 p.m. 6 Jan 2018 Final Presentation: 9:00 a.m. – 6:00 p.m.	Leadership Enhancer - Essential Communication Skills Course (Level 4): Effective Presentations – TED style (LEAS2252) Application (Language: English)	S4 – S6
16 Dec 2017 9:30 a.m. – 12:30 p.m. 23 Dec 2017 9:30 a.m. – 3:30 p.m. 6 Jan 2018 9:30 a.m. – 12:30 p.m. 13 Jan 2018 9:30 a.m. – 4:30 p.m. 20 Jan 2018 9:30 a.m. – 12:30 p.m.	Leadership Explorer Course (Level 1): Adaptive Leader (LEAP1121) Application (Language: Cantonese)	P6 – S4
Personal Growth and Social Development (Primary)		
27, 28, 29, 30 Dec 2017, 20 Jan 2018, 22, 23, Feb 2018, 24, 27, 28, 29 Mar 2018 9:00a.m. – 1:00p.m./ 2:00p.m. – 6:00p.m. (Students choose ONE session only)	Let Us Shine! (PGSPWCC0090-91, PGSPWCCA020-A021) Application Let Us Shine! (PGSPWCC0092-94, PGSPWCCA022-A025) Application (Language: Cantonese/ English, please refer to programme flyers for more details.)	P4 – P6
Personal Growth and Social Development (Secondary)		
20 Jan 2018 9:30a.m. – 12:30p.m.	Affective Education Workshop - Self Management I (PGSSW0024) Application (Language: Cantonese)	S1 – S3
10 Feb 2018 9:30a.m. – 12:30p.m.	Affective Education Workshop - Self Management II (PGSSW0025) Application (Language: Cantonese)	S1 – S3
17 Mar 2018 9:30a.m. – 12:30p.m.	Affective Education Workshop - Self Management III (PGSSW0026) Application (Language: Cantonese)	S1 – S3

Tentative Student Programmes and Events in December 2017 to March 2018 (Free of charge)

Tentative Date	Programme/ Event	Target Participant (HKAGE student members)
Humanities (Secondary)		
Jan to Mar 2018	Speaking & Listening II Course (Level 2): The Art of Persuasion and Speechwriting (ELLS2222) (Language: English)	S1 – S3
Mathematics (Primary)		
Jan to Feb 2018	Discrete Math, Probability, Statistics Course (Level 1): Probability paradox (MATP2522) (Language: English)	P4 –P6
Mar to Apr 2018	Algebra Course (Level 1): Algebra Enrichment 2 (MATP2212) (Language: English)	P4 –P6
Mar to Apr 2018	Discrete Math, Probability, Statistics Course(Level 1) : Statistics Around Us（ MATP1711 ）(Language: Cantonese)	P4 –P6
Mathematics (Secondary)		
Feb to May 2018	CGMO Training 2018 (Phase I) (MATS1121) (Language: Cantonese)	S1 – S6
Feb to May 2018	Introduction to Olympiad Mathematics 2018 (Phase I) (MATS1151) (Language: Cantonese)	S1 – S6
Sciences (Primary)		
Jan 2018	Astronomy 2 Course (Level 1)：Our New solar System – From Earth to Planet Nine (SCIP2402A ）(Language: Cantonese)	P4 – P6
Feb 2018	Food Science (Level 1): Food Science in Daily Life (SCIP1331）(Language: Cantonese)	P4 – P6
Feb 2018	Electricity Course (Level 1): Electrostatics and Current Electricity（SCIP1051）(Language: Cantonese)	P4 – P6
Sciences (Secondary)		
Feb 2018	Intermediate Course in making innovative products by using Arduino and 3D printing (TECS2301) (Language: Cantonese)	S1–S3
Personal Growth and Social Development (Secondary)		
12 Jan 2018 6:00p.m. – 8:00p.m.	Frivers' nite (PGSST0009) (Language: Cantonese)	S1 – S6
16 Mar 2018 6:00p.m. – 8:00p.m.	Frivers' nite (PGSSS0019) (Language: Cantonese)	S1 – S6
Advanced Learning Experiences		
Dec 2017 – Aug 2018	Student Organizing Team for Senior Student Club Event (SSCLUB/so)	S1 – S6 HKAGE Student Members (Full and preliminary)
Dec 2017 – Feb 2018	Senior Student Club Event (SSCLUB/001&2) (Language: Cantonese)	S1 – S6 HKAGE Student Members (Full and preliminary)
Mar 2018 – Aug 2018	How a Gifted Minds Starts – Collection (SIE/SD/001)	• S1 – S6 HKAGE Student Members • Student non-members
Mar 2018	How a Gifted Minds Starts – Seminar (SIE/SD/002)	• S1 – S6 HKAGE

		Student Members • Student non-members • Parents

- For updated information of tentative student programmes and events, please visit: http://www.hkage.org.hk/en/student-programme/face-to-face.
- For details of online programmes, please visit: http://www.hkage.org.hk/en/student-programme/online.
- For details of Programme Subsidy Scheme for Student Members, please visit: http://www.hkage.org.hk/students/student/programmes/subsidy-scheme/for-students.
- For details of parent and educator programmes, please visit: http://www.hkage.org.hk.