Evaluation for the Use of Diversity Learning Grant / Gifted Education Programs 2015/16

Gifted Education Committee 2015/2016

Objectives

- 1. To devise systematic and strategic planning to identify gifted and talented students who possess outstanding performance or potential in some aspects and to foster their holistic development as well as their commitment to serving the community
- 2. To provide challenging learning opportunities for gifted and talented students so as to fully develop and stretch their potential in a wide range of specialist areas, including leadership, creativity, personal-social competence.
- 3. To develop school-based training programs and to support students to participate in external competitions and gifted education programs

Note: The Renzulli's Three-Ring Conception of Giftedness and Howard Gardner's Theory of Multiple Intelligences are adopted for screening and selection of gifted and talented students through multiple channels and pathways.

Year Plan under Diversity Learning Grant (DLG)

The activities to be carried out in the academic year 2015/2016 are as follows:

- 1. ROV Class (Remotely Operated Vehicle) for Inter-school ROV Competition
- 2. Putonghua Enhancement Course (For S3-S4 students)
- 3. Strategic planning & Interviewing skills in focused professions (For S6 students)
- 4. Preparative course for The Beijing Youth Science Creation Competition 2016
- 5. Preparative course for Scientific Competitions
- 6. Junior Achievement Company Program 2015
- 7. Creative English Writing Course
- 8. Preparative course for Hong Kong Schools Magic Competition
- 9. Preparative Course for Inter-school Chinese Medicine Competition
- 10. Faraday Challenge Day 2016
- 11. Subsidy for external gifted programs

Evaluation of Action Plan & Use of Diversity Learning Grant (2015-16)

Committee: Gifted Education Committee

Major Area(s)	Implementation	Expenditure	Performance	Results of Evaluation	Person
of Concern	Date	Expenditure	Indicators	Results of Evaluation	in-charge
 ROV Class (Remotel Operated Vehicle) for Inter-school ROV Competition To educate students about the knowledge in ROV To foster application or STEM for problem solving and development of communication skills and leadership 	Sept 2015 to July 2016	Materials & transportation: HK\$30,643	 Students' attendance is at least 80%. 80% of the participants find the training useful. The knowledge in STEM, creativity, high order thinking, communication skills and leadership of students have been enhanced. 	 3 S1 students and 3 S2 students participated in the 11th Hong Kong/Asia Regional of the MATE International Remote Operated Vehicle (ROV) Competition co-organized by the Institution of Engineering and Technology, Hong Kong (IET HK) and HKUST on 16-17 April, 2016. They showed good cooperation, and able to apply their creativity, high order thinking and knowledge in STEM to solve problems. Their robots successfully completed the tasks required by the Challenge. They were enthusiastic and would continue to modify their design to participate in the competition in next year. One S.6 student started to teach the ROV team Arduino programming skills. 	Gifted Education Committee (TSN, WAN, CSH)
 2. Putonghua Enhancement Course (For S3-S4 students) To enhance students' Putonghua proficiency especially in speaking and the ability in reading and spelling with Hanyu Pinyin 	From November 2015 to July 2016	,	 Students' attendance is at least 80%. 80% of the participants find the course useful. The Putonghua proficiency of students has been enhanced. 	 1. 18 students were recruited and their average attendance rate was over 90%. 2. It was observed that the students 	PTH Dept (THL, MHK) Gifted Education Committee (CSH)

3.--	Strategic planning & Interviewing skills in focused professions (For S6 students) To train up students' strategic planning skills & self-management skills. To promote their awareness on JUPAS choices of selection. To train up students' interviewing skills in focused professions	Oct 2015 to Dec 2015	Training course: (9 hours x 2 course) HK\$18,100 (by CLPG) HK\$0.00 (by DLG)	2.	focused study at one JUPAS choice. Students have prepared for self-introduction.	2.	The student survey reflected that 100% of the participants found the course useful and they agreed that the course helped them understand better about their strengths and weaknesses, career choices and the strategy of assigning JUPAS choices, and had equipped them with practical interviewing skills through Mock Interview and Self-Introduction. The students performed well in the Mock interview. They prepared suitably for the interview and the interviewing skills like keeping good eye contact, speaking smoothly and confidently, showing courtesy and attention to other candidates were suitably exhibited. The overall attendance rate was 80% and the target was achieved.	Gifted Education Committee (CSH, KCH)
4.-	Preparative program for Scientific Competitions To prepare students for The Beijing Youth Science Creation Competition 2016 and other competitions To train up students' creativity, leadership, problem solving skills and knowledge in STEM	July 2015 to Aug 2016	Training materials and transportation: HK\$1,000	 2. 3. 	Students' attendance is at least 80%. Students performed well in The Beijing Youth Science Creation Competition 2016 Scientific knowledge, and problem solving skills of students have been enhanced.		Five S.4 and S.5 students joined the 36th Beijing Youth Science Creation Competition and were awarded the First Prize of Excellent Youth Science & Technology Innovation Project, and the First Prize Award. The Competition provided a valuable eye-opening opportunity to students and their creativity, leadership, problem solving skills and knowledge in STEM were greatly enhanced. They became more confident and skillful in delivering a speech and giving presentation. They showed enjoyment and pride in sharing their learning experience with schoolmates.	Gifted Education Committee (CSH, TSN)

5.	Preparative course for Scientific Competitions To train up S4 & S5 students to participate in study project or Research Program	July 2015 to July 2016	Training course: HK\$2,139	 Students' attendance is at least 80%. 80% of the participants find the courses useful. The research skills and confidence of students have been enhanced. 	 2. 3. 	Two S.6 students modified the "Care Mug" and submitted their design to the Student Biennial Conference 2015. They showcased the product to the public in an exhibition and an oral presentation session organized by HKAGE. They received two awards, the 2nd HKAGE Student Biennial Conference Poster Exhibition – Presenter Award and the 2nd HKAGE Student Biennial Conference Concurrent Session – Presenter Award. They developed their presentation skills and problem solving ability.	Gifted Education Committee (CSH)
6.	Junior Achievement Company Program 2015 To train up S4 & S5 students to participate in Junior Achievement Company program	July 2015 to July 2016	Training course: HK\$3,461	 The students successfully designed and implemented their own business. Students participate in the final competition. The management, leadership, problem solving skills and confidence of students had been enhanced. 	2.	Students successfully set up their own business and sold their products in school and at the trade affair. Students participated in the final competition and won 3 awards (Best Presentation, Creativity and Innovation, and Corporate Sustainability).	Gifted Education Committee (CSH, KCH)
7.	Creative English Writing Course To train up students' creativity and communication through creative writing	July 2015 to July 2016	Training course: HK\$15,000	 Students' attendance is at least 80% Students show ability to appreciate English Literature and write poems or other creative writing products 	1.	This one of a kind tailored-made English Creative Writing progamme had been exclusive for STGSS senior form students. Through intensive 8 weeks training, our students were able to produce high standard prose. It covered the range from fiction to creative non-fiction. Through observation of their open presentation, the creativity, observation, communication skills and English proficiency of students were greatly enhanced. Their motivation and interest in studying English literature were also emerged. Attendance was over 90%.	Gifted Education Committee (KYF, CSH)

8.	Preparative course for Hong Kong Schools Magic Competition	July 2015 to July 2016	Training course: HK\$4,600	skill, manipulative skill and confidence of the students had been enhanced. 2. From an open sharing, the students reflected that Magic training greatly enhanced her confidence in making presentation in front of people and she displayed conscientiousness and perseverance in the training.	Gifted Education Committee (CSH)
9.	Preparative Course for Inter-school Chinese Medicine Competition	July 2015 to July 2016	Training course: HK\$6,450	1. Students' attendance is at least 80%. 2. 80% of the participants find the courses useful. 3. The knowledge in Chinese Medicine & high order thinking skills of students have been enhanced. 2. A strong team spirit was successfully cultivated. The two S3 students showed high responsibility and outstanding leadership. They provided excellent mentorship to the S1 and S2 new members. They worked in good collaboration and studied hard on revising the Chinese Medicine knowledge. They also set questions to challenge each other and rehearse for the quiz several times. It greatly helped them to grasp the professional knowledge quickly. 3. They dedicated great effort to prepare for the microfilm to display their research results on specific Chinese Medicine topic. Their knowledge and interest in Chinese Medicine were significantly enhanced, also their creativity, organization and various high order thinking skills were properly fostered. 4. Overall attendance was over 90%.	Gifted Education Committee (MHM, CSH)

			1	To prepare students well for	. 1	IJSO HK Screening Test 2015	ı
			1.	Joint School Science	1.	Five students with the best results in IJSO	
				Competition /		training course were selected to join the	
				other competitions		IJSO Hong Kong Screening 2015-16. One	
			_			of them obtained Second Class Award and	
			2.			two obtained Third Class Award. The	
				STEM-related knowledge		Second Class Awardee was nominated to	
				of students thorough		join a training course at CUHK.	
				seminars, exhibitions,			
				exchange programs,	2.	Physics Olympiad 2016	
				research and internship.		Three S.4 students were enrolled to	
						participate in the "Hong Kong Physics	
			3.	STEM-related knowledge		Olympiad 2016". They attended the	
				and various generic skills of	•	competition on 8/5/2016 afternoon at the	
				students have been greatly		Hong Kong Baptist University. 4C Tang	
				enhanced.		Wing Hin and 4C Chan Chung Ngai	
						obtained a Third Honour Award and	
		Materials and				Honourable Mention respectively.	
10. Programs for STEM J	July 2015 to July	Transportation:					
Education	2016	•			3	Hong Kong Biology Olympiad for	
		HK\$3,540				Secondary Schools 15/16	
						A total of nine S5 students were	
						nominated to participate in the HK	
						Biology Olympiad for Secondary School	
						this year. Extra-lessons were conducted	
						by MHM to equip them with all the	
						essential biology knowledge for the	
						olympiad. They had to complete a 1-hour	
						multiple choice questions which were	
						related to the HKDSE syllabus of Biology.	
						5C Wong Yuen Yi won the Third Class	
						Honor Award while 5C Cheng Tze Kwan	
						and 5B Kan Ka Chung both attained the	
						Merit Awards. The competition was	
						organized by HKASME in order to	
						promote the learning morals in studying	
						Biology.	

	4. Hong Kong STEM Olympiad 2016
	This event aimed at nurturing not only
	individual STEM subject knowledge but
	also integrated skills and problem solving
	techniques for innovative ways of dealing
	with contemporary environmental issues
	through the teamwork of the student
	participants. Four S6 students participated
	in the STEM Olympiad on 8th July 2016
	in the Education University of Hong Kong
	(Tai Po campus). They commented the
	competition as enjoyable and valuable
	experience which enable them to make
	use of their knowledge in a practical way.
	The questions were challenging and
	inspiring.
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	5 Carandam Calcal Mathamatica and
	5. Secondary School Mathematics and
	Science Competition organized by PolyU
	12 students joined the competition.
	Students talented in both Mathematics and
	Science were selected. They showed
	enthusiasm in both preparing and
	participating the competition. 5C Lai Chin
	Pang had won Medal Award in Chemistry
	category
	6. <u>Faraday Challenge Day 2016</u>
	Our school worked jointly with The
	Institute of Engineering and Technology
	to host a one-day STEM education
	programme for junior secondary school
	students. Five other government schools
	were invited to take part in Faraday
	Challenge Day at our school on 12 March,
	2016. Our school also nominated a team
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of six S.1 students. All participants had to
use limited amount of token to buy some
materials for making a robotic arm used in
a transplant surgery. Our students learned
the importance of team work,
communication skills, scientific
knowledge and mathematics application.
The feedback from the judges and
participants were promising.
7 Education Fair 2016
7. Education Fair 2016 Sin S. A. and S. S. atvidents in in add the "The
Six S.4 and S.5 students joined the "The
Student Education Fair on Science,
Technology, Engineering and
Mathematics 2016". They demonstrated
their water level measurement system in
the Fair and they obtained the
"Outstanding Booth Presentation Award".
8. 5th Model Solar Boat Challenge
Eight S.3 and S.4 students were selected to
participate in the inter-school competition
"5th Model Solar Boat Challenge" at Arts
& Technology Education Centre (ATEC)
on 6/7/2016 (Wed). The students had
acquired engineering skills to perform
various tests to optimize the speed of their
model solar boats. They were inspired to
apply physics knowledge in the
competition.
8. Summer Internship Program at BUHK
5 students were nominated to BUHK to
attend a Summer Internship Program about
applying DNA technology for toxic metal
ions detection. The students found the

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	program very fruitful and earned some
	valuable experience in carrying out a
	scientific research in an advanced
	laboratory.
	9. The Shaw Prize Lecture in Life Science and
	Medicine 2015 Six S.4 to S.6 students attended the Shaw
	Prize Lecture in Life Science and
	Medicine 2015 on 25 September, 2015.
	Professor Bonnie L Bassler and Professor
	E Peter Greenberg spoke on the topic
	"Bacterial Quorum Sensing and Its
	Control" and "The Social Life of Bacteria-
	The collapse of a Culture" respectively.
	The seminar was well-received and the
	students found it enlightening and the
	feedback was positive.
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	10. Innocarnival 2015
	Thirty-nine 3D students had visited the
	Innocarvnival held in the Science Park on
	2nd November, 2015. This year's theme is
	"InnoTech – Key to a Boundless Future". It
	was an educational and interesting event
	and students participated enthusiastically in
	seminars, talks, guided tour, competitions
	and workshops.
	11. Seminar: Science Beyond Imagination
	4 S4 students were nominated to participate
	in the Seminar titled Science Beyond
	imagination, which exemplified how theory
	of Physics and general science could be
	applied in daily life and for making real life
	products. It helped extend and enrich the
	knowledge of students.

				12. HKU Junior Science Institute 2 S4 students were nominated to participate in the HKU Junior Science Institute for the courses on Genetic Engineering, Discovering the Earth and Meet your Meat. The students found the courses inspiring and stimulating and using in enriching their knowledge.	
11. To subsidize students enrolled in gifted education programs offered by local tertiary institutes or external organizations.	Sept 2015 to Aug 2016	\$3,169	 The students have completed the subsidized courses. Students are able to reflect on their learning and aware of the benefits from the courses. Students share their learning experience with schoolmates. 	 High School Science Camp 2016 Ten S4 students participated in the High School Science Camp organized by the Hong Kong Student Activity Committee. They had an opportunity to stay in the campus of Dalian University and visit the centers of science and technology development, Science Park and laboratories. Students were benefited by making new friends with students from mainland China and Taiwan and widening their horizon on the science development trend in China. John Hopkins University CTY Programme 1 student joined the John Hopkins University CTY Programme. (KYF) Through learning with elite students from other secondary schools, it broadened his horizons. The program was challenging and enriched his knowledge in application of Mathematics in problem solving. Australia National Chemistry Quiz 2016 33 S.3 to S.6 students participated in the Australia National Chemistry Quiz 2016. 	Gifted Education Committee (all members)

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	4. HKUST Dual Program Three students completed Dual Program offered by HKUST. 5A Cheung Tin Hang obtained A+ in Physics Level 1 and was enrolled in the Level 2 Physics. 4C Tang Wing Hin obtained A- in Physics Level 2.
	5. <u>Astronomy Program</u>
	3 students were nominated an astronomy program organized by YMCA. Their knowledge in Astronomy, observation and leadership skills were enhanced.
	6. Outward Bound Leadership training program 10 S4 students were nominated to join the Outward Bound Leadership training program and all of them were awarded the Certificate of Achievement. Their communication skills, problem solving skills, leadership and creativity were greatly enhanced. 7. Student Leaders Mainland Exchange Program at Peking University Two team of students were nominated to the Student Leaders Mainland Exchange Program in December 2015 and April 2016 respectively. The students were exposed to a network of student leaders and their leadership, communication skills and inter-personal skills were enhanced.

8. Sharing in Morning Assembly Students participating in Leadership Training Program, High School Science Camp and various competitions were invited to share their experience in the Morning Assembly.
9. Experience Sharing & Celebration Party Student representatives from various gifted education programs, activities and competitions shared their learning experience and a congenial learning atmosphere was witnessed.
10. Genetic Engineering Training Program 3 S4 students were nominated the Genetic Engineering Training Program 2016 organized by the Hong Kong Federation of Youth Groups. They learnt how to carry out a series of experiments involving cultivation of bacteria and duplication of DNA. Their scientific knowledge, high order thinking skills and laboratory skills were much enhanced.

Gifted Education Committee-Use of Diversity Learning Grant Financial Report 2015-2016

Summary:	
Item 1: ROV Class for Inter-school ROV Competition	30,643
Item 2: Putonghua Enhancement Course (For S3-S4 students)	14,000
Item 3: Strategic planning & Interviewing skills in focused professions	0
Item 4: Preparative course for The Beijing Youth Science Creation Competition 2016	1,000
Item 5: Preparative course for Scientific Competitions	2,139
Item 6: Junior Achievement Company Program 2015	3,461
Item 7: Creative English Writing Course	15,000
Item 8: Preparative course for Hong Kong Schools Magic Competition	4,600
Item 9: Preparative Course for Inter-school Chinese Medicine Competition	6,450
Item 10: Programs for STEM Education	3,540
Item 11: Subsidy for external gifted programs	3,169
Miscellaneous & Reserve	6,998
	Total: \$91,000