**Cheung Chuk Shan College**

**Programme Evaluation Report for**

**DLG Other Programmes: Gifted Education for the school year 2021-2022**

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| **Programme** | **Objective(s)** | **Targets**  **(No./level/selection)** | **Duration/Start Date** | **Deliverables** | **Evaluation** | **Expenditure** |
| Gifted Education Programmes by various universities and NGOs 1 – CUHK Summer Institute  (Current Topics in Public Health) | To provide students with an overview of several current public health topics such as COVID-19, obesity, mental health and aging problem. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 13, 15, 16, 17, 18 and 19 August 2022 * 6 lessons, 2.5 hours each | * A roleplay about the livelihood of an elderly * Hands-on experience of using different devices to measure health indices * Handouts and assignments | * The student gained a deeper insight in different topics in public health. * The student enjoyed the course as the professors were humorous and the explanations were clear. * Many group works were incorporated in the course so that students could interact with each other and make friends. | $54,520 |
| Gifted Education Programmes by various universities and NGOs 2 – HKU Medify Summer Immersion Programme | To provide students with experience in the medical industry by offering clinical demonstrations and classes taught by university academics.  To provide students an opportunity to learn about the journey to become a medical professional by offering discussion and sharing sessions from current students and recent alumni of the University. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 9 August – 13 August 2022 | * Simulations such as CPR, blood sample taking and emergency triage * Lecture notes and sharing sessions by professors * VR experience to observe a real surgery and the anatomage table | * The student gained a deeper insight on the curriculum of MBBS and developed more interest in the medical field. * The student enjoyed the course a lot as the professors were honest and humorous. The lectures were clearly delivered as well. * The student enjoyed the sharing sessions as mentors were friendly and useful information and advice was given. |
| Gifted Education Programmes by various universities and NGOs 3 – CUHK Summer Institute (Chemistry in Human History) | To enable students to learn basic Chemistry concepts and knowledge related to life science.  To let students appreciate the correlation between Chemistry and the history of human society development. | * 2 S5 students * Self-nomination to the programme organizer and the screening process by the programme organizer | * 13 August – 19 August 2022 * 4 online Zoom lectures and 2 on-site lab courses at the Chinese University of Hong Kong | * A two-page essay about one of the six given chemical compounds * Research on the impacts of the chosen chemical compound to human history | * The attendance of students was high (over 95%). * Students enjoyed the activities and interesting experiments in the two lab sessions, including dye making and nylon making. * Students learnt about how Chemistry is related to human society and how close science is to our daily life. * Students gained experience on writing an organized essay. * Students were more familiar with the practical experiments which helped to consolidate the knowledge learnt during lectures. |
| Gifted Education Programmes by various universities and NGOs 4 –The Hong Kong University of Science and Technology (HKUST) Dual Program (DP) 2021 | To enhance students’ interest and enable them to acquire advanced knowledge in the subject domain. (Mathematics) | * 2 S5 students * The students were nominated by the gifted education coordinator and was accepted to the programme after the screening process by the HKUST | * 20 November – 30 November 2022 * 18 online lessons, three hours each | * 7 assignmentsal * 2 open-book examinations | * The attendance of students was high (over 95%). * Deeper understanding of calculus and mathematical sense were developed. * The course and exercises given enhanced students’ problem-solving skills. * The course facilitated the further study of Mathematics Module 2 in the current school curriculum. * The derivations of the theorems and formulas were clearly explained. |
| Gifted Education Programmes by various universities and NGOs 5 –CUHK Summer Institute (Introduction to Data Science) | To help secondary school students acquire knowledge in disciplines related to data science and get experience in solving problems with advanced statistical techniques. | * 2 S5 students * Self-nomination to the programme organizer and the screening process by the programme organizer | * 13 August – 18 August 2022 * 6 online lessons, 2.5 hours each | * A 5-page report about solving a problem of interest using data analytic skills | * The attendance rate of students was nearly 100%. * Students were able to learn different data graphs and methods to visualize data effectively. * Students were able to analyze data and predict trends effectively using the analytic skills learnt. * Students were able to understand how a data set could generate useful information by following several case studies and data models. |
| Gifted Education Programmes by various universities and NGOs 6 – Summer Program for the Gifted and Talented 2022 (CUHK)  (Basic Relativity – Online Course) | To enable students to get a touch of what relativity is by using a Mathematical approach.  To let students develop peer interaction skills via discussions and presentations. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 6 August, 13 August and 20 August 2022 * 3 online lessons, 6 hours each. | * Lesson notes * Scientific article reading and presentation * Quizes | * The attendance rate of students was high. * The student was interested in the topic and raised questions actively during the course. * The tutor answered the questions effectively, even preparing an extra PowerPoint to illustrate the ideas involved. * Extensive topics and unsolved mysteries about space and time were discussed with a lot of interaction. * The student prepared a presentation using resources provided as well as online research. During the preparation of the presentation, the student learnt to cooperate with others. * The virtual visit to the Jockey Club Museum of Climate Change was enjoyable and insightful. |
| Gifted Education Programmes by various universities and NGOs 7 – HKU Engineering Academy for the Talented 2022 | To provide students with an opportunity to develop an initial understanding of the core subjects taught in the Bachelor of Engineering degree programme. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 23 August – 26 August 2022 * 4 lessons, 7 hour each | * Students programmed a car to finish tasks and finished all the related debug jobs | * The attendance rate of students was high (nearly 100%). * The student learnt a lot of engineering related knowledge (e.g. Lidar systems in mechanical engineering, gene modifying in biochemistry engineering, AI learning mechanisms for computer engineering). * The student was able to accomplish tasks given during lectures. * The student enjoyed being creative during the programming task. |
| Gifted Education Programmes by various universities and NGOs 8 – Winter Program for the Gifted and Talented 2021 (CUHK)  (Biochemistry and Disease II) | To introduce biochemistry to the students and discuss its applications in the medical field. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 23 December – 28 December 2021 * 2 lessons, 6 hours each | * Lecture notes | * The attendance rate of student was high (nearly 100%). * The student enjoyed the programme in general as she had an interest in becoming a physician. * The programme was not particularly interactive as most of the knowledge is relatively difficult and new to senior secondary students. Biochemistry knowledge is mainly conveyed by the professor, without much active participation from students. * Before introducing biochemistry, the professor introduced biology and chemistry separately in order to bridge the knowledge gap. A wide array of topics related to biochemistry were introduced in-depth, especially the endocrine system and metabolism in humans. * CUHK student ambassadors provided a lot of guidance by sharing their fruitful experiences as a biochemistry student in CUHK, as well as some constructive tips for the secondary students to prepare for their careers. |
| Gifted Education Programmes by various universities and NGOs 9 – HKU Neuroscience Academy for the Talented 2022 | To introduce high-school students to the structure and function of the nervous system. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 16 August – 19 August 2022 * 4 lessons, 9 hours each | * A valuable chance to dissect a brain * A session to learn to piece the brain together | * The professor was friendly and willing to answer questions from students. The lessons were clearly delivered. * The student learnt a lot as the content taught was very advanced and way above the secondary biology curriculum related to the central nervous system. |
| Gifted Education Programmes by various universities and NGOs 10 – Winter Program for the Gifted and Talented 2021 (CUHK)  (Introduction to Criminal Psychology) | To introduce to students psychological reasons and disorders behind criminal activities. | * 1 S5 student * Self-nomination to the programme organizer and the screening process by the programme organizer | * 8, 15, 22, 29 January and 12, 19 February 2022 * 6 lessons, 3 hours each | * One case study and mock diagnosis of a criminal behavior at the end of each lesson | * The attendance rate was 100%. * The student learnt a lot about criminal psychology, including psychological reasons behind crimes such as arson, murder and rape, how the external environment can change the behavior of a person and how a person builds his/her moral principles. |
| Gifted Education Programmes by various universities and NGOs 11 – Innovative Chemistry STEM Programme 2022 (CUHK) | To enable students to understand the importance of sustainable development and acquire concrete chemical knowledge for achieving the sustainable development goals.  To let students gain hands-on experience on chemical analysis using advanced instruments. | * 2 S5 students * Self-nomination to the programme organizer and the screening process by the programme organizer | * 22 August – 25 August 2022 * 4 lessons, 7 hours each | * Lecture notes * Experiment results | * The attendance of students was high. * Students learnt to analyse chemicals using machines and gained hands-on experience under supervision of professors and student helpers. * The professors and tutors were adept at explaining the difficult theories. |
| 歷史資料分析研習班 | 精進學生分析歷史資料的能力 | * 中五及中六學生共八名 * 考試表現良好 (中五為上學期考試表現、中六為去年度下學期考試表現) | * 中六：九月至十二月，十教節 * 中五：二月至五月，十教節 * 每教節1.5小時 | * 每節一項歷史資料分析課業 * 每節一次由參加者評改他人之課業 | * 參加者藉評改他人之課業，成功提升對歷史論述的評鑑能力。(中六) * 參加者通過完成課業，大幅加強歷史資料分析能力。(中五、中六) * 於本科文憑試中取得第5級或以上之中六生，皆曾擔任小老師。 | $13,200 |
| Economics Analytical Skill Workshop | To polish students' high-order thinking skills in Economics | * Selected S6 Economics students * Based on the HKDSE estimated levels for S6 students by the School | * Sept 2021 – Jan 2022, (13 sessions, 1.5 hours each) | * Specially designed worksheets and problem sets | * The programme was effective in developing students’ analytical techniques required to attempt higher order thinking tasks. The tutor had provided constructive feedback to students. Most of the students find the workshop useful. | $4,100 |
| Critical Thinking Skill Enhancement Workshop | To polish students’ critical thinking skills in analyzing case study questions during the study of BAFS Management Module | * S5 – S6 BAFS (BM) students * Students who have potential to achieve Level 5 or above in HKDSE BAFS (BM) * (by referring to their HKDSE estimated levels) | * S6: Sep – Dec 2021 (30 sessions) * S5: Feb – June 2022 (30 sessions) | * Case study sample questions with varying levels of difficulty | * The programme was effective in developing students’ analytical techniques required to attempt higher order thinking tasks. | $24,000 |
| 文學創作精進班 | 提升學生文學創作的能力 | * 中四學生共五名 * 按有關同學中文科成績及面試表現篩選 | * 2021年9月至12月，共十教節（每節1.5小時） | * 每節一份文學創作分析課業 | * 參與學生於文學創作的解題、構思、內容組織及表達手法等均有所提升，增加對寫作的興趣。 | $4,800 |
| Liberal Studies High-order Thinking Skills Enhancement Workshop | To polish students' high-order thinking skills | * Higher performers in S6 LS classes * Nominated by subject teachers concerned based on the HKDSE estimated levels for S6 students by the School | * Oct – Dec 2021 (10 sessions, 1 hour each) in classrooms | * Students took part in the learning activities and discussion with the help of the notes, worksheets, exercises and practice papers specially designed for enhancement workshop | * The attendance of students was high. * The tutors provided timely advice and feedback to students. * The students’ skills of high-order thinking, logical reasoning, collaborative learning, effective communication and problem solving have been developed. * The students’ horizons have been broadened and they have developed wider perspectives in analyzing various issues. | $6,000 |
| Logical Reasoning Workshop t | To enhance students' comprehension and communication abilities, understanding to some of the principles of logics and to realize the usefulness of logic in their thinking & writing | * Selected S4-S5 students in S4 & S5 CS classes * Selected S4-S5 students nominated by subject teachers based on their school assessment performances | * 09:30-12:00, 9 Aug 2022 in two classrooms | * Workbook tasks, a series of logic games and practices | * The tutors from the commissioned Edvenue® Limited were professional and the workshop design was good. * The tutors interacted well with students with discussion and other learning activities. * The large majority (over 90%) of students found that the trainers were professional, friendly and satisfied with their teaching. * The attendance of students was high and the large majority of students found that the program was useful (S4:81%; S5:93%) and inspired their thinking (S4:90%; S5:86%). | $10,000 |