

CCC Kei Yuen College
2023-2024
Year Report — Integrated Science

1. Major concerns:
 - 1.1. To strive for academic excellence.
 - 1.2. To embrace whole-person development.

2. Achievements and reflection on major concerns:
 - 2.1. To strive for academic excellence.

Targets	Achievements	Reflection
<ul style="list-style-type: none"> • To foster proactive and self-motivated learners 	<ul style="list-style-type: none"> • Teachers have assigned pre-lesson tasks to students in each unit. • Both paper worksheets and MS Forms with video watching were prepared in the pre-lesson tasks. • After reading a book or online searching information about science experiments, students made a home experimental video. Selected good work have been broadcasted on campus TV and given bonus marks in CAS. 	<ul style="list-style-type: none"> • In MS form, teachers can get immediate results from students and know which parts are the students' misconception. In paper worksheet, students can draw diagrams and show the steps in calculations clearly. • Some students are confident in using spoken English to explain the science theory behind in making the video.
<p>Feedback and Follow-up</p> <p>Feedback: Some students are familiar with the IT skills, and like reading to explore more about science. They can make use of the technology to make experimental video. Others feel shine and less confident in speaking English and so they prefer to use subtitles in video making. Pre-lesson tasks and SRL studies can enhance students' motivation to acquire and construct a broad and solid knowledge. Besides, pre-lesson tasks and SRL help cultivate students to become self-directed learners for future study.</p> <p>Follow-up: Promote STEAM education by arranging more STEAM project-based learning for students, to enhance students' interest and abilities in learning science, and strengthen the IT learning element through the "hands-on" cross-disciplinary learning activities.</p>		
<ul style="list-style-type: none"> • To unleash academic students' potential 	<ul style="list-style-type: none"> • S1-S3 eMarkers' Report has been done in each unit tests, first term exam and final exam to analyze students' performance and give suggestions to improve students' performance and examination results. 	<ul style="list-style-type: none"> • eMarkers' Report in unit test, first term exam and final exam will also be conducted in the coming academic year.

Feedback and Follow-up

Feedback: From the markers' report, teachers can make use of IT and data processing to analyze the difficulties of students' learning and give timely follow-up measures.

Follow-up: Deal with students' weakness in some topics and concepts. Give students the follow-up exercise to diagnose student needs and closely monitor the progress of students' learning.

<ul style="list-style-type: none"> • To cater to diversity of students with various talents and learning needs 	<ul style="list-style-type: none"> • A web-based database has been set-up and launched to store documents of differentiated instruction strategies, tiered assignments, pre-lesson tasks and SRL materials. • Ten S1 students and four S2 students got excellence awards in integrated science in the first term exam. Seven S1 students and six S2 students got excellence awards in integrated science in the final exam. • Six S3 students got excellence awards in Physics in the first term exam. Four S3 students got excellence awards in Physics in the final exam. • One S3 student got excellence award in Chemistry in the first term exam. Two S3 student got excellence award in Chemistry in the final exam. • Two S3 students got excellence awards in Biology in the first term exam. Eight S3 students got excellence awards in Biology in the final exam. • Three S1 students and three S2 students got improvement awards in IS in the final exam. • Three S3 students got improvement awards in Physics in the final exam. • Three S3 students got improvement awards in Chemistry in the final exam. • Three S3 students got improvement awards in Biology in the final exam. 	<ul style="list-style-type: none"> • The requirements for the improvement awards and excellence awards will also be conducted next year.
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Feedback and Follow-up

Feedback: Students feel a sense of achievement and satisfaction through praise and encouragement.

Follow-up: More awards and praise can be given to students to provide a positive learning environment for students. It can all be powerful tools for motivating students to acquire and construct a broad and solid knowledge.

2.2. To embrace whole-person development.

Targets	Achievements	Reflection
<ul style="list-style-type: none"> • To nurture positive values and attitudes in students. 	<ul style="list-style-type: none"> • In Creative Fun Day (STEAM), student helpers participated in the STEAM activities for primary school students. • In Life-wide learning Day, S2 students joined the Ocean Park Life-wide Learning Pack ‘Animal Stranding Investigator’ which included workshop, worksheet and admission ticket for students to explore and acquire knowledge of animals. • In STEAM Week, student helpers prepared for the game stalls which included flight simulation, micro:bit robotics, drone soccer, VR games, AR activities and 3D pen creative drawing. Apart from student helpers, parent helpers from the Parent Teacher Association enjoys the 3D pen creative drawing too. The exhibition included students’ learning experience sharing about the competitions and students’ products in the competitions. Besides, the smartwatch STEAM course was arranged for all S1 classes, and the organic lip balm workshop was arranged for all S2 classes. Different types of cute stickers for the lip balm cans were designed by S4 VA students. The workshop of Programming in Calculator was organized for the students who are interested in mathematics. The posters and banners were designed by S4 VA students, while the vocabularies about STEAM subjects ‘Topic of the Month’ were prepared for students’ learning by the English Enrichment Team. • Two students participated in the HKAGE Secondary Science Online Learning Programme for Screening. • One student finished the MOOC course about Science in the Duke University. 	<ul style="list-style-type: none"> • Creative Fun Day (STEAM), S2 life-wide learning day, and STEAM activities, workshop and course during the STEAM Week were conducted successfully. Students learned a lot outside of the textbook knowledge. Their eagerness to learn more and team collaboration to finish the task was appreciated.

Feedback and Follow-up

Feedback: Most students understand their own interests and abilities, and reflect upon personal goals with aspirations for further studies and future career through the activities, competitions and gifted education.

Follow-up: More students will be encouraged to participate in various activities, competitions and gifted education to develop their generic skills in an integrative manner, and to become a self-directed learner for future study and work.

3. Activities:

3.1. Internal and external activities:

Date	Activities / Course / Workshop	Organizing body	No. of participants
4-11-2023	Creative Fun Day-STEAM Activity	CCCKYC	15 S.3-S.6 student helpers, 40 Primary 5-6 students from 18 primary schools
5-11-2023	InnoCarnival 2023	Innovation and Technology Commission	26 S2-S5 students
10-11-2023	“Gear Up – Nano World” Outreach Programme	Hong Kong Science Museum	Many S1-S6 students
Jan-Apr 2024	Junior Secondary Science Online Self-learning Scheme (JSSOSS) 2024	EDB	100 S1-S3 students
17, 18, 23 Jan 2024	Making enzyme detergent	CCCKYC	130 S1 students
6-2-2024	Game Stall: 3D pen creative drawing to welcome the Lunar New Year	CCCKYC	Many S1-S5 students
8-3-2024	S2 OLE period-Career exploration: The field includes science and innovation	CCCKYC	129 S2 students
22-3-2024	S2 Life-wide learning Day: Ocean Park Life-wide Learning Pack-Animal Stranding Investigator (including workshop, worksheets and admission tickets)	CCCKYC	129 S2 students

25-4-2024	Game Stall: VR and AR activities (Incorporating with the Guidance Committee in the 'Cheering Day')	CCCKYC	Many S1-S5 students
7-5-2024 and 8-5-2024	Organic Lip Balm Workshop for S2 classes during the STEAM Week.	CCCKYC	129 S2 students and 12 S4 VA Students
9-5-2024 and 10-5-2024	Smartwatch STEAM Course for S1 classes during the STEAM Week.	CCCKYC	130 S1 students
6-5-2024 to 10-5-2024	STEAM Week: Game stalls (Flight Simulation, 3D Pen Creative Drawing, Micro:bit Robotics, Drone Soccer, VR and AR activities), Exhibition, Smartwatch STEAM Course, Organic Lip Balm Workshop, and Programming in Calculator Workshop	CCCKYC	20 S2-S5 student helpers, parent helpers, and many participants during lunchtime and after school
May-June 2023	Water rocket design and competition	CCCKYC	129 S2 students

3.2. External competitions:



Competition	Organizing body	Awarded students
Junior Secondary Science Online Self-learning Scheme (JSSOSS) 2024	EDB	Gold Award: 1A(32) You Tsz Wing 1D(23) Guo Xin Hao 2C(22) Chen Haoran 3B(04) Chan Tsz Chun 3B(21) Leung Sen Silver Award: 1B(02) Chong Wing Ki Bronze Award: 2A(04) Gurung Suzane 2D(08) Ho Pak Yi
雞蛋撞地球	Hong Kong Association for Science & Mathematics Education	2nd Runner-up 2D(20) Chan Hoi Ka 2D(21) Chin Ka Sing

4. Financial report:

No.	Category	Particulars	Budget (\$)	Actual Expenditure(\$)
1	Teaching Aids/Materials	Movable bench with chemical resistance surface (F&E)	31,500	17,820
2	Activities	Bridging programme for S4 (CEG) (\$200 x 27 hours)	5,400	4,320
		STEAM Week (LWL) Activities, course and workshop	49,500	34,574
		Files	200	0
3	Others	Consumable	19,000	9,502
		Miscellaneous items	800	0
Total			106,400	75,756

5. Evaluation on P-I-E cycle

Planning	Date	Document	Link
(a) Minutes	Late August 2023	2324 1st IS Panel Meeting Minutes	<u>Link 1</u> KYCloud\2.Document Submission\2023-2024\09 Minutes\30 Integrated Science Panel
(b) Year plan	Late August 2023	2324 Year Plan- Integrated Science	<u>Link 2</u> KYCloud\2.Document Submission\2023-2024\17 Year Plan\02 Subjects\06 Integrated Science
Implementation			
(a) Pre-lesson task	The whole year	Videos, worksheet and MS form	<u>Link 3</u> KYCloud\5 professional development\2023-2024\01 learning community\01 Good practices\06 Integrated Science\03 Pre-lesson tasks
(b) SRL study on selected topics	Nov-Dec 2023 April-May 2024	Peer lesson observation with lesson plans version 0*, version 1* etc...	<u>Link 4</u> KYCloud\5 professional development\2023-2024\01 learning community\01 Good practices\06 Integrated Science\04 SRL lesson study

(c) Experimental video making	Feb-May 2024	Products / Videos	<u>Link 5</u> TEAMS\Subject_Panel_IS_Files\Students' Outstanding Work
Evaluation			
(a) Markers' reports	Oct 2023- July 2024	Markers' reports with suggestions to improve students' performance after unit tests and exams	<u>Link 6</u> KYCloud\2.Document Submission\2023-2024\07 Markers Report\06 Integrated Science
(b) Minutes	Mid Feb 2024, Early July 2024	2324 2nd IS Panel Meeting Minutes 2324 3rd IS Panel Meeting Minutes	<u>Link 1</u> KYCloud\2.Document Submission\2023-2024\09 Minutes\30 Integrated Science Panel
(c) Surveys on Participation of science activity / competition	April 2024 and June 2024	MS Form	<u>Link 7 (April)</u>  <u>Link 8 (June)</u> 
(d) Year report	Mid July 2024	2324 Year Report- Integrated Science	<u>Link 9</u> KYCloud\2.Document Submission\2023-2024\18 Year Report\02 Subjects\06 Integrated Science

6. Major concerns in 2024-25:

6.1. To deepen and sustain Academic Excellence

6.1.1 To deepen the positive impact of proactive learning

6.1.2. To focus on learning and teaching effectiveness

6.2. To uphold and enhance Whole Person Development

6.2.1. To uphold the development of students with Keiyuenese virtues, positive attitude, information literacy and career aspiration

7. Working team:

Pui Yung Lin (Panel Head), Chan Ho Yin, Lam Hon Sum, Lam Sin Yee, Wong Wai Sum, Leung Pui Lai, Ma Wai Yin.