

CCC Kei Yuen College
2023-2024
Year Plan-Integrated Science

1. Aims:
 - 1.1 To arouse students' curiosity so as to develop their interest in Science.
 - 1.2 To help students learn the basic experimental skills and the use of general apparatuses.
 - 1.3 To raise students' awareness of laboratory safety.
 - 1.4 To develop students' creative thinking.

2. Present situation:
 - 2.1 Strengths:
 - 2.1.1 Teachers are well-experienced and passionate about teaching.
 - 2.1.2 Teachers are active in attending the seminars related to the new curriculum so that they have better understanding of the new trends in science.
 - 2.1.3 Laboratory facilities are renewed constantly.
 - 2.1.4 Students are interested in science.
 - 2.2 Weaknesses:
 - 2.2.1 Students are dependent on the experimental steps shown in the textbook when they are doing practical work, showing their lack of high-order thinking skills.
 - 2.2.2 Students with keen interest in science and higher ability are not catered for in the current curriculum.
 - 2.2.3 Some students get used to study by memorization and therefore they are weak at analytical thinking skills and problem-solving skills in the unfamiliar questions.
 - 2.3 Opportunities:
 - 2.3.1 Students would like to participate in science activities and competitions, and take gifted education course outside school to get more exposure and broaden horizons.
 - 2.3.2 Teachers assign the pre-lesson task as common practice in daily teaching to enhance the learning effectiveness of students.
 - 2.4 Threats:
 - 2.4.1 It takes time to change the learning style of students by enforcing the scheme of self-directed learning to foster proactive learners.

3. Major concerns:
 - 3.1 To strive for academic excellence.
 - 3.2 To embrace whole-person development.

4. Implementation Plan and Methods of Evaluation:

4.1 To strive for academic excellence:

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Teacher in Charge	Resources Required
<ul style="list-style-type: none"> To foster proactive and self-motivated learners 	<ul style="list-style-type: none"> To organise a sharing session to equip teachers with skills in editing well-designed pre-lesson tasks. 	<ul style="list-style-type: none"> At least two sharing events conducted per year in panel meeting. 100% of teachers adopt at least one guided learning plan with pre-lesson tasks and group activities for lesson observation. 	<ul style="list-style-type: none"> Review for meetings and minutes. Exercise book inspection and lesson observation. 	Whole year	Subject teachers	/
	<ul style="list-style-type: none"> To assign pre-lesson tasks to students as common practice in daily teaching. 	<ul style="list-style-type: none"> Students are able to complete the pre-lesson tasks in each unit. 	<ul style="list-style-type: none"> Review for meetings and minutes. 	Whole year	Subject teachers	
	<ul style="list-style-type: none"> To promote a strong reading ambience by arranging RaC 	<ul style="list-style-type: none"> After reading a book about science experiment, S3 students are able to plan, design and carry out an experiment with proper skills and techniques, and make an experimental video. Selected good work will be broadcasted on campus TV and given bonus marks in CAS. 	<ul style="list-style-type: none"> Teachers' observation. 	Second term	S3 Subject teachers	

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Teacher in Charge	Resources Required
<ul style="list-style-type: none"> To unleash students' academic potential 	<ul style="list-style-type: none"> To use eMarkers' Report to monitor students' learning progress 	<ul style="list-style-type: none"> Use the eMarkers' Report in unit tests to analyse students' performance and design follow-up assessment. 	<ul style="list-style-type: none"> Review for meetings and minutes 	Whole year	Subject teachers	/
<ul style="list-style-type: none"> To cater to diversity of students with various talents and learning needs 	<ul style="list-style-type: none"> To enhance knowledge management implementation by setting up web-based database; documents of lesson plan with differentiated instruction strategies, tiered assignments and pre-lesson tasks will be stored. To set up subject excellence awards for gifted students. 	<ul style="list-style-type: none"> A well-organised web-based database launched to store lesson plans, worksheets and assessments with clear classifications for easy search and retrieval by teachers. For S1 and S2 I.S., not more than 10 eligible student who have demonstrated excellent results in integrated science subject in the 1st term and final exams. For S3 Phy, Chem and Bio, unlimited no. of students who have demonstrated excellent results in the 1st term and final exams. 	<ul style="list-style-type: none"> Review for meetings and minutes Students' reflections 	Whole year	Subject teachers	/

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Teacher in Charge	Resources Required
<ul style="list-style-type: none"> To cater to diversity of students with various talents and learning needs 	<ul style="list-style-type: none"> To set up improvement awards. 	<ul style="list-style-type: none"> Three eligible students who has demonstrated significant improvement in performance in science subject when comparing with the 1st term and the final exams. 	<ul style="list-style-type: none"> Students' reflections 	Whole year	Subject teachers	/

4.2 To embrace whole-person development:

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Teacher in Charge	Resources Required
<ul style="list-style-type: none"> To nurture positive values and attitudes in students 	<ul style="list-style-type: none"> Encouraging students to take part in science activities and competitions and to enhance Keiyuenese virtues: Respect 	<ul style="list-style-type: none"> Students' continuity in participation in different science activities and competitions. 	<ul style="list-style-type: none"> Records of students' participation in different activities 	Whole Year	Subject teachers	Financial support from Life-wide Learning Grant and school
	<ul style="list-style-type: none"> Arrange STEAM course / workshop for students in STEAM week to enhance the Keiyuenese virtues: Love of learning. 	<ul style="list-style-type: none"> S2 students' participation in Ocean Park Life-wide Learning to explore and acquire knowledge of animals. 	<ul style="list-style-type: none"> Records of students' participation in different activities 	Late Mar 2024	Science teachers	
		<ul style="list-style-type: none"> Students' participation in STEAM week. 	<ul style="list-style-type: none"> Record of students' participation in STEAM week 	Early May 2024	S2 subject teachers	

5. Documents regarding P-I-E cycle

Planning	Date	Document
(a) Minutes	Late August 2023	2324 1st IS Panel Meeting Minutes
(b) Year plan	Late August 2023	2324 Year Plan-Integrated Science
Implementation		
(a) Pre-lesson task	The whole year	Videos, worksheet and MS form
(b) SRL study on selected topics	Nov-Dec 2023 April-May 2024	Peer lesson observation with lesson plans version 0*, version 1* etc...
(c) Experimental video making	Feb-May 2024	Products / Videos
Evaluation		
(a) Markers' reports	Oct 2023- July 2024	Markers' reports with suggestions to improve students' performance after unit tests and exams
(b) Minutes	Mid Feb 2024, Early July 2024	2324 2nd IS Panel Meeting Minutes 2324 3rd IS Panel Meeting Minutes
(c) Surveys on participation of science activity / competition	April 2024 and June 2024	MS Form
(d) Year report	Mid July 2024	2324 Year Report-Integrated Science

*We draft the lesson plan. We then implement the lesson plan, evaluate the lesson plan, and then adjust the lesson plan. We then implement the adjusted lesson plan for a second round in a new class of the same form, and then re-evaluated, such that the lesson plans and teaching materials gradually become mature and stable.

6. Budget:

No.	Category	Particulars	Budget (\$)
1	Teaching Aids / Materials	Movable bench with chemical resistance surface (F&E)	31,500
2	Activities	Bridging programme for S4 (CEG) (\$200 x 27 hours)	5,400
		Files	200
3	Others	Consumable	19,000
		Miscellaneous items	800
Total			56,900

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.