

Sir Ellis Kadoorie Secondary School (West Kowloon)

STEM Education (2020/2021)

Programme Plan

School Major Concerns:

Theme: Multiple Pathways to Glory

1. Excelling Effective Learning and Teaching
2. Excelling Students' Core Values and Potential
3. Excelling Teachers' Professional Development

I. Achievement Targets (AT)

1. To arouse the interest of students in learning science, technology, engineering and mathematics through hand-on projects.
2. To equip students with the ability to take holistic approach to solve problems by integrating different disciplines.
3. To allow students to acquire basic programming knowledge.
4. To strengthen students' ability to perfect and embellish the end products.
5. To strengthen students' ability on act and design.

II. Strategies / Tasks to achieve targets

AT	Strategies / Tasks	Time scale	Success Criteria	Method of Evaluation	People Responsible	Resource Required (\$)	Use of Grant*
1,2,3,4	To use micro-computers or electronic controllers as means for learning programming in lesson time <ol style="list-style-type: none"> Lego Robotic learning lesson service Fischertechnik Micro:bit X marker student course Drone training 	2 lessons per week on each class	<ul style="list-style-type: none"> At least 70% of the S.2 students found STEM lessons interesting. At least 2 STEM related competitions are joined for target students in one academic year. 	Questionnaires / Teachers' observation	STEM education teachers	a. 45,000	LWL
						b. 40,000 (30 sets)	LWL
						c. 49,000	Sister school program
						d. 25,000	
1, 4, 5	To do hands-on projects, product finishing or artwork. Design a Fai Chun decoration						
1, 3, 4	To join external competitions to broaden student's horizon <ol style="list-style-type: none"> Unerwater Robotic competition (HKUST) Robotic Intelligence DIY 2020 	Whole Year				a. 1,000 b. 1,000 c. 1,000	LWL LWL LWL
1, 2, 3, 4, 5	To establish a STEM exhibition	first term (Open day)				7,000	LWL

Estimated Total: \$ 170,000

* LWL= life wide learning grant