

Po Leung Kuk Lee Shing Pik College

Plan on Use of One-off Grant to Secondary Schools for the Promotion of STEM Education for the 2018/19 academic year

Task Area	Major Area(s) of Concern	Strategies/Tasks	Time Scale	Resources Required	Benefits Anticipated	Success Criteria	Method(s) of Evaluation	Teacher-in-charge
I. Hardware Purchasing A. Subject: Computer Literacy	<ul style="list-style-type: none"> <li>Using more LEGO EV3 sensors or motors to solve higher level problems</li> </ul>	<ul style="list-style-type: none"> <li>Procurement of LEGO EV3 components and other STEM tools or teaching components for enriching S2 and S3 computer literacy lessons</li> </ul>	14-16 lessons of S2 and S3 in the second term	\$32,000	<ul style="list-style-type: none"> <li>Students will be able to use more LEGO EV3 sensors or motors to solve higher-level problems or using other STEM boards to control electronic components.</li> </ul>	Over 80% of the relevant students complete the simple tasks in the lessons.	Observation of students' performances and teachers' comments.	Subject Head of Computer Literacy (Mr. Chu C.P.)
B. Subject: Physics	<ul style="list-style-type: none"> <li>Setting up of the game 'Escape the Room' with five traps.</li> </ul>	<ul style="list-style-type: none"> <li>Procurement of materials, chemicals and equipment for setting up the traps in 'Escape the Room' organized by the Physics Panel</li> </ul>	Second term of the academic year	\$4,000	<ul style="list-style-type: none"> <li>Enhance participants' problem solving skill through science and technology.</li> </ul>	<ul style="list-style-type: none"> <li>a. At least five traps are designed and the activity is completed successfully.</li> <li>b. Over 80% of the participants indicate that the activity can enhance their knowledge and/or skills in relevant discipline of STEM.</li> </ul>	<ul style="list-style-type: none"> <li>a. Observation of participants' performances.</li> <li>b. Analysis of data collected through verbal evaluations of participants.</li> </ul>	Subject Head of Physics (Mr. Chow C.F.)

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C. Subject: Integrated Science and /or Science Department	<ul style="list-style-type: none"> <li>Organizing STEM related activities or workshops</li> </ul>	<ul style="list-style-type: none"> <li>Procurement of materials, chemicals and equipment for organizing STEM activities in school</li> </ul>	Second term of the academic year	\$20,000	<ul style="list-style-type: none"> <li>Participants' interests in STEM can be aroused.</li> </ul>	Over 80% of the participants indicate the activities can enhance their knowledge and/ or skill in relevant discipline of STEM.	Analysis of data collected through verbal evaluations of participants and teachers' comments.	Subject Head of Integrated Science (Mr. Chin C.W.)
D. Science Department	<ul style="list-style-type: none"> <li>Display the updated STEM information</li> </ul>	<ul style="list-style-type: none"> <li>Procurement of multi-media display system for exhibiting updated STEM information at the school main gate or in the playground</li> </ul>	Second term of the academic year	\$40,000	<ul style="list-style-type: none"> <li>Students' interests in STEM can be aroused and they can get more updated information.</li> </ul>	Over 80% of the students indicate the arrangement can enhance their knowledge through the latest STEM information.	Analysis of data collected through questionnaires.	Subject Head of Integrated Science (Mr. Chin C.W.)

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II. Activities and/or Competitions A. Science Department	<ul style="list-style-type: none"> <li>Participation of courses, workshops and/or competitions related to STEM</li> </ul>	<ul style="list-style-type: none"> <li>Application for the courses, workshops and/or competitions concerning relevant discipline of STEM for the selected students and teachers</li> </ul>	Whole academic year	\$7,219.1	<ul style="list-style-type: none"> <li>Sharing of the new knowledge and/or skills learnt to schoolmates after the courses.</li> </ul>	a. Students complete the courses with at least 85% of attendance rate shown in the record of learning. b. Over 80% of the selected students indicate that the activities organized in the courses, workshops or competitions help enhance their knowledge and/ or skill in relevant discipline of STEM.	a. Analysis of attendance record. b. Analysis of data collected through verbal evaluations of participants and teachers' comments.	Subject Head of Integrated Science (Mr. Chin C.W.)
	<ul style="list-style-type: none"> <li>Increasing participation rate by shortening the travelling time</li> </ul>	<ul style="list-style-type: none"> <li>Transportation to the venue of the activities organized</li> </ul>	Whole academic year	\$6,000	<ul style="list-style-type: none"> <li>Saving participants' time, especially for activities organized during school time or after school</li> </ul>	Over 80% of the participants indicate that such arrangement can save their time in travelling.	Analysis of data collected through verbal evaluations of participants	

**Balance B/F 2017/2018: HK\$109,219.10**

**Total estimated expenditure: HK\$109,219.10**

Name of Principal: FUNG Nga Sze, Agnes

Signature: \_\_\_\_\_

Date: 27<sup>th</sup> August, 2018