

#### ST. LOUIS SCHOOL ANNUAL PLAN 2019-2020

#### **SUBJECT / TEAM**

#### **COMPUTER SUBJECTS**

#### (I) Aims

- (a) To equip students with problem-solving and communication skills and encourage them to think critically and creatively.
- (b) To develop students into competent, effective, discrimating, ethical and confident users of ICT, so as to support their lifelong learning.

#### (II) Situational Analysis

- (a) Strengths
  - 1. Teachers are experienced, knowledgeable, cooperative, supportive and willing to learn and apply new technology.
  - 2. Students are interested in the subject.
- (b) Weakness
  - 1. CAL room is not an ideal place to conduct various STEM activities and most of the equipments in CAL room are not in good conditions.
- (c) Opportunities
  - 1. iPads, Lego resources, drones, mobile phones and mBots are available for interactive activities organized in the lesson and after school.
  - 2. Students have chances to participate different kind of Robotics competitions held in Hong Kong.
  - 3. New grant and funding (QEF DFP, ITIL & Life-wide Learning Grant) are available for use to support ICT and STEM activities.
- (d) Threats
  - 1. Some students might be distracted by mobile device during the lesson.
  - 2. Boys are weak in language expression and less patient to learn seriously on academic computer basic knowledge from textbook.

#### (III) Highlight

- (a) S1 to S3 curriculum are now tuned in the coming several years to line up with the trend of the STEM and coding.
- (b) Choose appropriate electives for ICT students to learn to obtain a better DSE result.

#### (IV) Short Term Direction

(a) To help ICT students to prepare better for HKDSE.

## (V) Areas of Concern

#### 1. Major Concern 1: Students as visionary leaders possessing enhanced thinking skills, especially creativity and problem solving

#### Program title (1): Code to fly

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
Students have solid and extensive knowledge base.	During normal lessons, students are required to complete a practical task by controlling or programming a drone. After the lesson, students are required to login to an online learning platform to complete tasks with different levels by using mobile devices.	Introducing new drone programming in S3 curriculum to make a wider and up-to-date coverage of knowledge.  50% of stduents complete half of the online tasks.	Result of students in the online learning platform	From Mar 2020 to Jun 2020	KSY+WCK	Code to fly curriculum, drones, goggles (\$45,000)

### Program title (2): Participation of various competitions

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
Students are able to identify needs and devise ways to meet the needs when facing problems, especially those real-life problems.	To encourage and coach students to participate in a territory-wide competitions [FLL, CCC, DMDIY] as a way of learning in real contexts and authentic settings.	Different teams can be formed. Can enter the semi-final is a merit. Team members enjoy the competitions through preparation.	Performance of the competition	Whole year	KSY+WCK+CYL	Around \$15,000 for the competition fee and tools

Program title (3): IT Corner

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
Students have solid and extensive knowledge base	To set up a corner to promote reading the computer books.	20% of students using the purchased computer books to do projects in the lessons (S1 Scratch and S3 App Inventor).	Observation	Whole year	KSY	Bookshelf (\$750) and latest computer books (\$6,000)

## Program title (4): Computer Assembly Course

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
Students have solid and extensive knowledge base	Extending knowledge acquisition beyond classroom teaching and textbooks through computer assembly activities for S5 ICT students.	More than 70% of participants attain at least 75% attendance.	Attendance records	Apr 2020 to May 2020	KSY	Computer parts for assembly activities (\$30,000)

# (VI) Other panel-based / team-based concerns:

## Program title (1): A.I. courses for S4 & S5 ICT students

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
Teachers are able to master new technologies and effective ways to	Coaching our S4 & S5 students by providing able students with A.I. programming courses	More than 70% of participants attain at least 75% attendance.	Attendance records	Oct 2019 to Nov 2019	KSY+WCK	Coaching fee and corresponding robotics kits

help students	offered by professional			(\$42,000)
acquire essentital	training centre.			
knowledge and skills				S5 A.I. Object
				recognition
				course
				(\$12,000,
				8hrs)
				S4 A.I. Nvidia
				Jetbot course
				(\$22,000,
				12hrs &
				Jetbot \$8,000)

# Program title (2): Mock ICT Exam

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Person in charge	Resources Required
S6 ICT students can obtain good experience to go through a mock examination with several thousands of students which can boost their performance in a real DSE examination	S6 ICT students can take part in mock ICT examination on January 2019 held by HKACE. St. Louis School teacher will help to mark their scripts so that their weakness can be identified. The approximate grade can be estimated to give students how much effect required for the real DSE examination.	S6 ICT students can obtain good experience to go through a mock examination with several thousands of students which can boost their performance in a real DSE examination.  50% of ICT students attend and complete the whole mock examination.	Attendance records and the result of students after the examination.	Enrolment at Oct 2019; Exam at Jan 2020; Marking at Jan 2020; Result at Feb 2020	KSY	\$1,700 to subsidy each, \$100 for each student to attend the whole paper

# (VII) Provisional Scheme of work

Month	Events	PIC / VPIC
Sept 2019	Recruitment of S1 to S4 studens to join FLL (First Lego League)	KSY+WCK+CYL
0001 2020	Computer magazine subscription for ICT students	KSY
Oct 2019	Process the application of HKACE mock exam held in Jan 2019	KSY
	S5 A.I. Course	KSY+WCK
	Recruitment of S2 studens to join Creative Coder Competition (CCC)	KSY+WCK
Nov 2019	S1 Information Day	KSY+WCK+CYL
	S4 A.I. Course	KSY+WCK
	S3 mobile app project	KSY+WCK
Dec 2019		
Jan 2020	Participation of HKDSE ICT mock examination (HKACE)	KSY
<b>5</b>	Marking of the ICT mock examination (HKACE)	KSY
Feb 2020	Competition (FLL)	KSY+WCK+CYL
	S3 Drone programming	KSY+WCK
Mar 2020	S2 STEM Project	KSY+WCK
Apr 2020	S5 Computer Assembly Course	KSY
7.6. 2020	Recruitment of S1 students to join DMDIY 2020 (Scratch Game Creation)	KSY+CYL
May 2020	Competition (CCC)	WCK+KSY
,	Competition (DMDIY)	CYL+KSY
Jun 2020	S1 Scratch Project (Interactive story book/Game)	CYL+KSY
Jul 2020		
Aug 2020	S5 ICT SBA tutorial class	KSY

# (VIII) Budget and Other Resources

	Amount
EXPENDITURE	
A. General Panel / Team-based budget	
A1. Reference materials for teachers (\$200 per teacher per level)	1,400.00
A2. Subject printing quota for each member (\$30 per teacher)	90.00
A3. School membership fee of HKACE	500.00
A4. Incentive fund to encourage S6 ICT students to sit for mock exam held by HKACE	1,700.00
A5. Teaching resources charged by Publishers (iClass, Longman)	2,000.00
A6. Books for student use in CAL Room (IT Corner)	7,000.00
A7. Purchasing parts for assembly course	5,000.00
A8. Stationery and accessories in CAL Room	500.00
A9. Consumable (battery, toner, cables, flash drive, portable hard disk, etc)	8,000.00
Sub-total (A) =	26,190.00
B. CEG	
Sub-total (B) =	\$0
C. Furniture and Equipment (F & E)	
C1. Bookshelf in CAL Room	750.00
Sub-total (C) =	750.00
D. DLG	
Sub-total (D) =	\$0
E. Reading Grant	

E1.	
Sub-total (E) =	
F. Life Wide Learning Grant (LWLG)	
F1. Robotics, Coding and Computer panel related competitions	15,000.00
F2. Drone programming curriculum (Code to Fly), drones and related materials	45,000.00
F3. A.I. programming courses for S4/5 ICT students	42,000.00
Sub-total (F) =	102,000.00
G. Budget of items using other specific grant from EDB*:	
*Chinese History, NCS or Student Support grant	
G1.	
Sub-total (G) =	
H. Other Resources	
H1.	
Sub-total (H) =	
Total Expenditure =	\$128,940.00

# (IX) Members

Mr. Kwok Sheung Yin Dominic (KSY) Miss Cheung Yik Lam Gloria (CYL) Mr. Wan Chi Kong (WCK)