King's College
Lesson Plan

Date: 22/9/2022	Form: 2D	Teachers involved:
Subject: Computer Literacy	Topic: Microsoft AI Computer Vision API App	LEE Ho-yin Silvester

(A) Objective: (Derived from Bloom's Taxonomy for learning outcomes)
   The student would be able to produce a photo description by the self-designed AI App.

(B) Reasons for choosing the topic:
   1. To strengthen students' problem-solving, collaboration and computational thinking competency and enhance their creativity and innovation.
   2. To nurture students to become ethical users of IT for pursuing life-long learning and whole-person development.
   3. To heighten students' interest in AI education and to boost students' spirit in scientific investigation.

(C) Teaching skills: Collaborative learning, Q&A questioning skill, multimedia, Step-by-step demonstration, learn outside the classroom, task practice

(D) Teaching mode: Face-to-face teaching

(E) Teaching resources: Microsoft 365 – Power Apps and Teams, Students' mobile phone

(F) High order thinking skill(s) / Study skill(s) promoted:
   1. For promoting self-directed learning, students can design an email box in their Apps and send an email with a photo description accordingly.
   2. For promoting creativity, students can write descriptive writing with the captured photo.

(G) Catering for Learner Diversity
   An excellent grade will be given to the first 12 classmates who share their work. Students are required to complete Tasks 1-2. High flyers are highly recommended to complete Tasks 3-4 to achieve the highest score. Individual guidance will be provided for students who cannot design their Apps successfully after school.

(H) Teaching Sequences: (Derived from Robert M.Gagné's Nine Events of Instruction)
   1. Gaining Attention, Stimulating recall of prior learning and Inform the Learner of the Objective
      The teacher informs students of the objective of the lesson and recalls their memory about computer vision. (Class Notebook: Collaborative Learning Activity)
   2. Presenting the Stimulus Material
      The teacher introduces how to publish the app and run it on a cell phone/tablet with a video and note (Activity 2).
   3. Eliciting Performance
      Students are required to publish their self-designed apps with MS Power Apps, switch on the phone and log in to the app.
   4. Providing Learning Guidance
      The teacher provides the guidelines for learning outside the classroom to the students.
   5. Assessing Performance
      Students go outside the classroom and try to take a photo with their AI App. High flyers can share their photos with AI descriptions to MS Teams' chatroom.
   6. Providing Feedback
      The teacher gives an excellent grade to the students who shared their photo descriptions. The teacher evaluates the learning process and gives some advice on creating the app.
   7. Enhancing Retention and Transfer
      Students are required to produce a photo description by the self-designed AI app. The teacher concludes the lesson and requires students to submit their tasks via Teams within a week.
      He also reminds the class to write descriptive writing by using the image description from the app in the English lesson, which is CL and English Cross-curricular Project.
      In addition, the teacher provides individual guidance for low-ability students after school on the same day.

The highlight sof the lesson activity

Students go outside of the classroom for testing their products after completing the AI App in computer class, expressing excitement.

After completing the creation of the AI App successfully, students showed the final product.