創新教師獎（團隊）

Innovative Teacher Award (Team)

Innovative Teacher Award

香港教育大學賽馬會小學

The Education University of Hong Kong Jockey Club Primary School

The EdUHKJCPS

香港教育城 HKedCity

Topic

全校起動創新教育的實踐經驗

Whole-school Approach to Actualising Innovative Education

創新教育 如何起動?

At

EdUHK Jockey Club Primary School,

we advocate

"Innovative Use of New Technology"

for

Learning and Teaching

Place

School background

Place

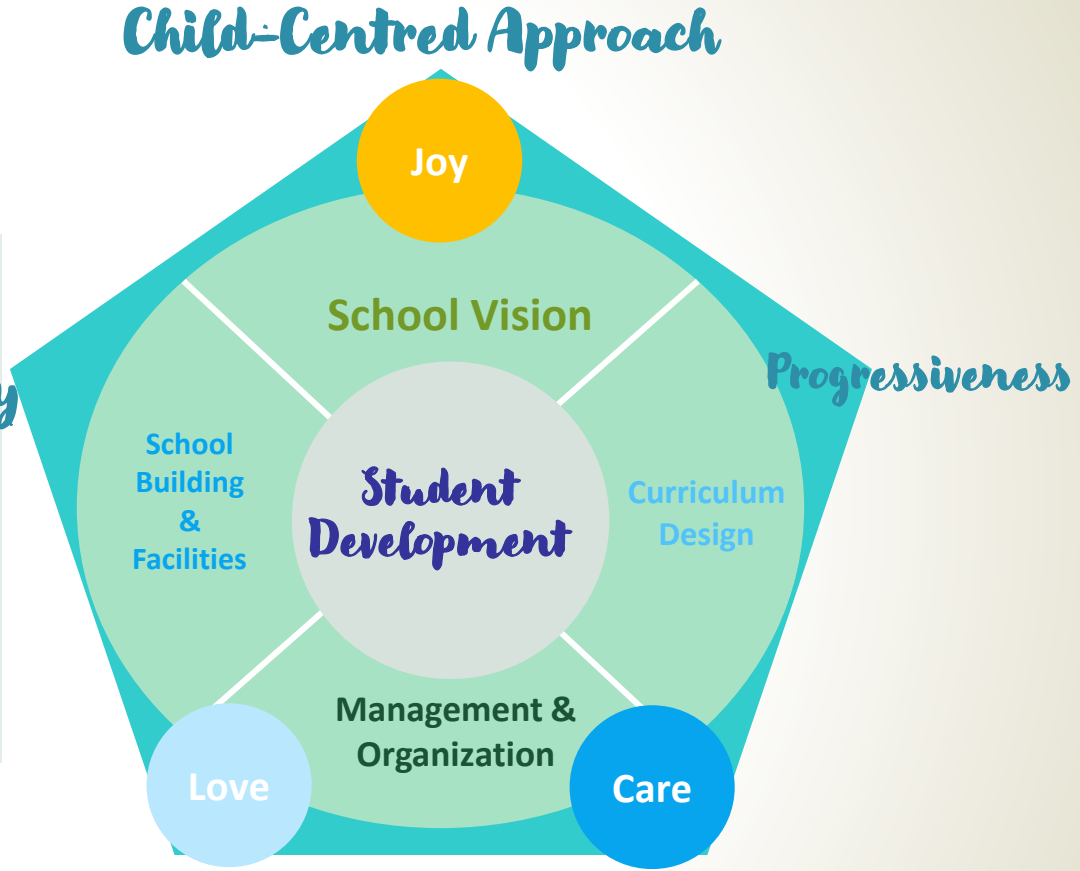
School background

- Government aided whole-day primary school
- Located on the EdUHK Campus
- Currently 27 classes
- 736 students, 63 teachers, 24 supporting staff
- Aim to establish a nursery development centre and an elementary school to demonstrate that shared learning and teaching is very important in the enhancement of the quality of education in Hong Kong.

Place

Our Core Values

We refer to the Core Values established by the group of scholars during school planning, and take a "child-centred" approach to develop school policies and practices.



Place

Vision

共享學教喜悅，盡展赤子潛能。

Place

Strategic Planning

Policy

學校周年計劃

2020 - 2021

（一） 關注事項 （2020-2021）

1. Harness the potential of new technology to expand innovative educational practices and enhance students' learning experience.

善用新科技，豐富學教經歷，提升互動，推動創新。

1.1 在教與學的設計中加入新科技的應用，透過科技創建平台，增強師生的互動性，提升學生學習興趣及機會。

1）提升教師團隊對新科技的認知，創建交流的平台。

2）透過共同備課及觀課，教師團隊在教學的設計中加入電子學習元素。

3）教師能運用電子平台獲得的數據以優化學教效能。

4）強化師生對微軟教育平台的認識，利用 TEAMS 作溝通及交流的特性，增強師生的互動。

5）引入新科技或透過遊戲學習，提升學生學習趣味，促進互動。

6）創建更多的網上平台，學生獲得更多的表達機會。

7）讓學生透過不同新科技的體驗及學習，掌握多元的表達方式，表達形式更具創意及個性化。

Our major concern (2018-2022)

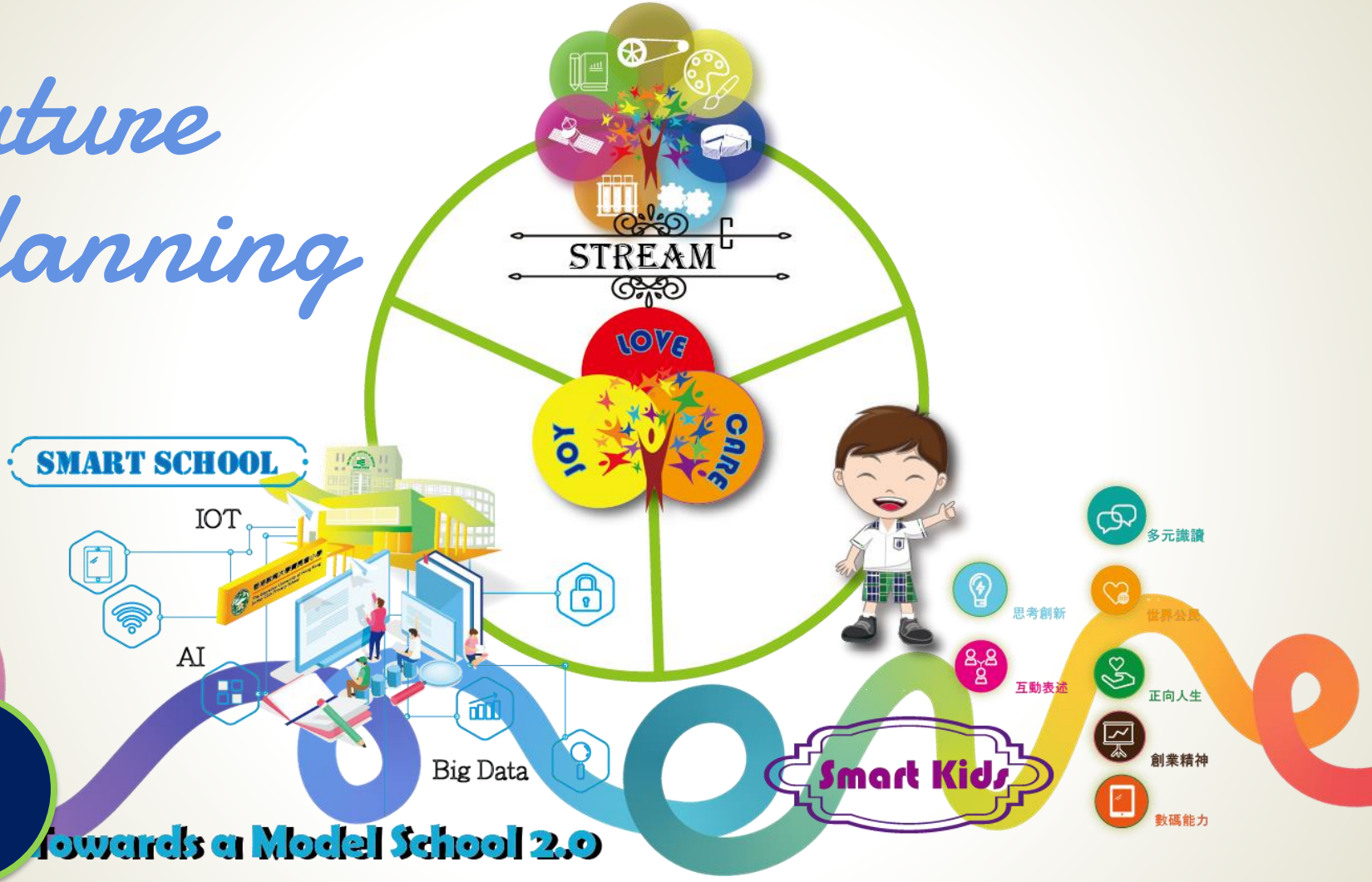
1. 善用新科技，豐富學教經歷，提升互動，推動創新。
Harness the potential of new technology to expand innovative educational practices, enhance interaction and students' learning experience.

2. 發展生命教育，培養學生良好品德。
Develop life education and cultivate students' good morals.

3. 聚焦提升教師專業能力，建設實踐社群。
Enhance teachers' professionalism and competencies to establish a community of practice

Policy

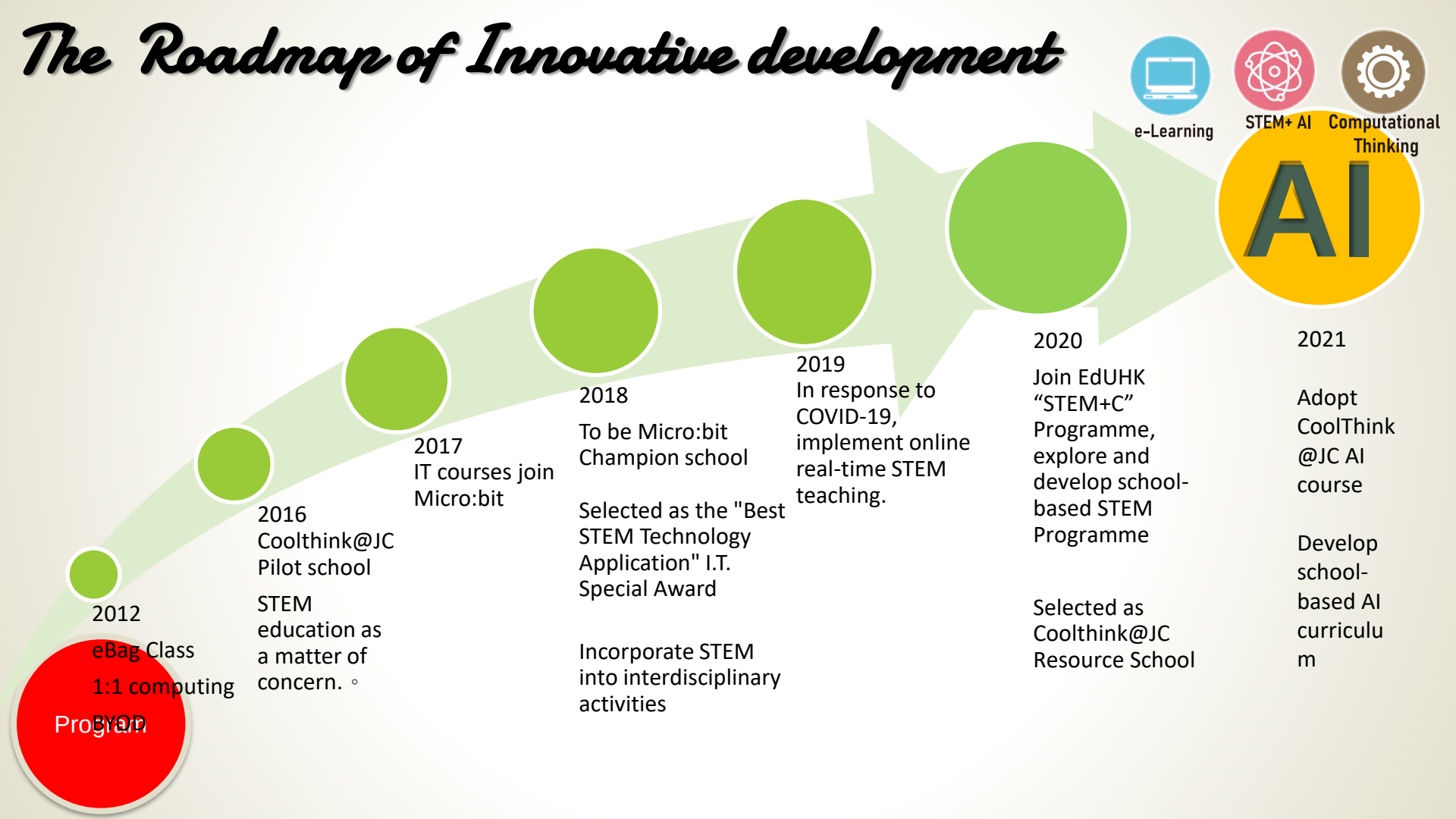
Future Planning



Policy

Towards a Model School 2.0

The Roadmap of Innovative development



Innovative mileage for the school

e-Learning

- 2012-2013 **Microsoft Innovative Pathfinder School**
  (one of 99 schools worldwide)
- 2013-2014 **Microsoft Innovative Mentor School**
  (one of 88 schools worldwide)

- 2014-2015
- 2015-2016
- 2016-2017
- 2017-2018
- 2018-2019
- 2019-2020
- 2020-2021
- 2021-2022

Program

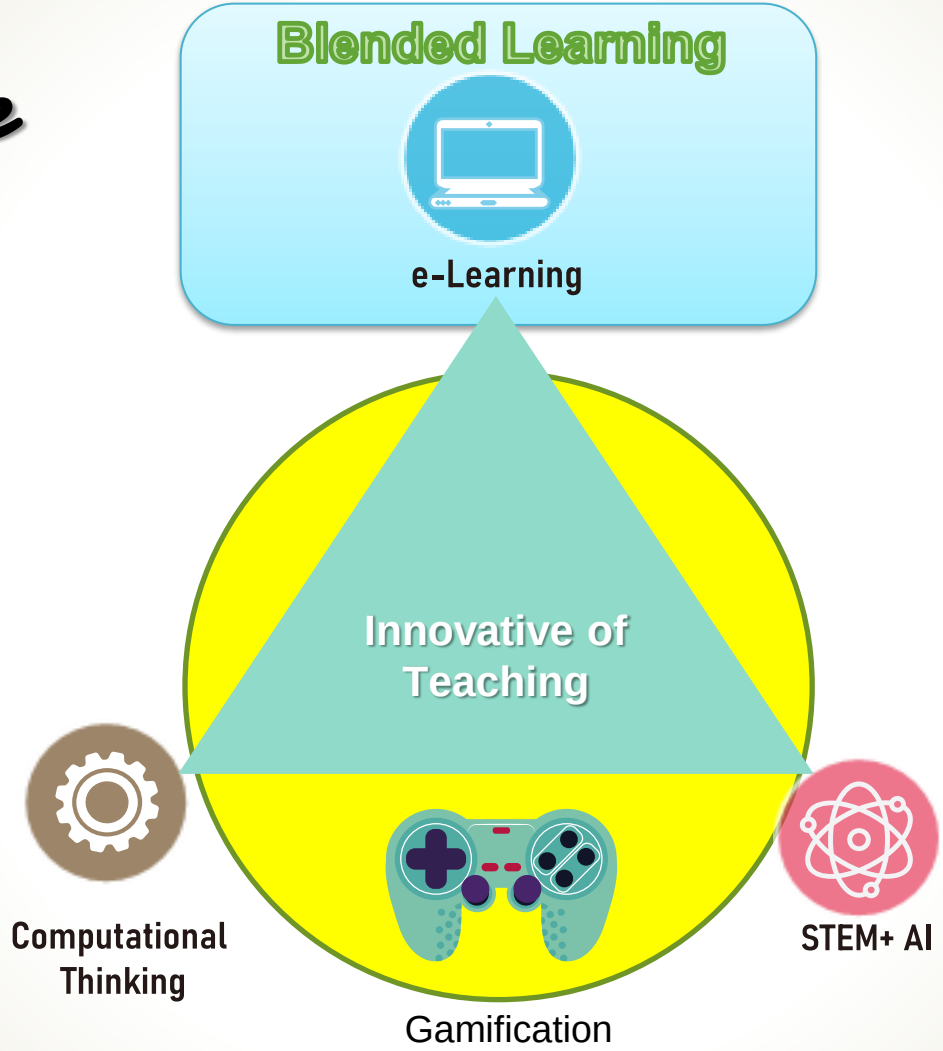
Innovative mileage for the school

- 2016- Now — The **Coolthink@JC***, co-organized by the EdUHK, MIT, the CityU and the Hong Kong Jockey Club, is one of the first **12 pilot schools** in Hong Kong.
- 2018-2019 — **Micro:bit Champion School**
- 2018-Now — **Edmodo Ambassador School**
- 2020-Now — Become one of the **5 resource schools** in the Coolthink@JC to help other schools develop computing thinking
- 2020-2021 — **5G Campus 2020-2021 Program Pilot School**

Program

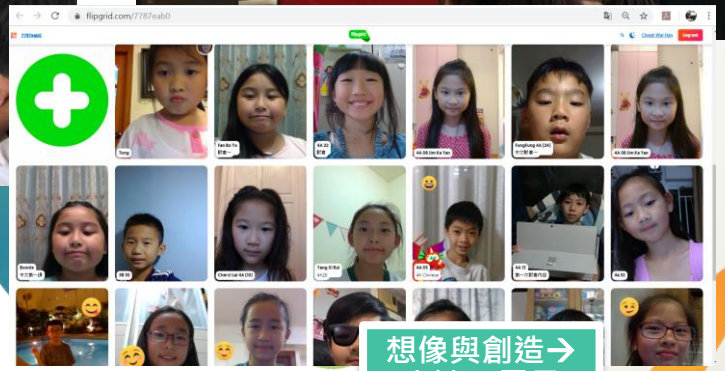
*CoolThink@JC awarded Seal of Alignment Standard by International Society for Technology Education (ISTE)

Innovative Focus



Program

電子學習



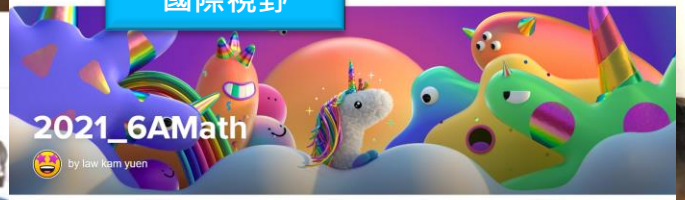
Program

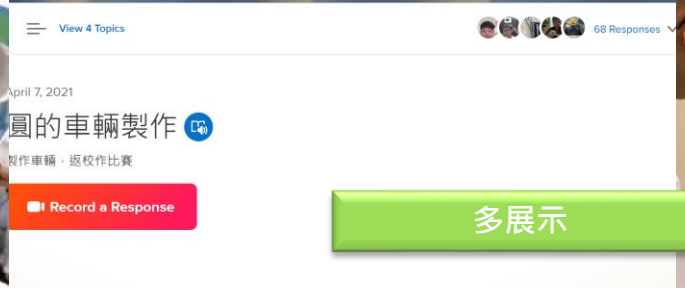
電子學習

分享展示的機會

國際視野

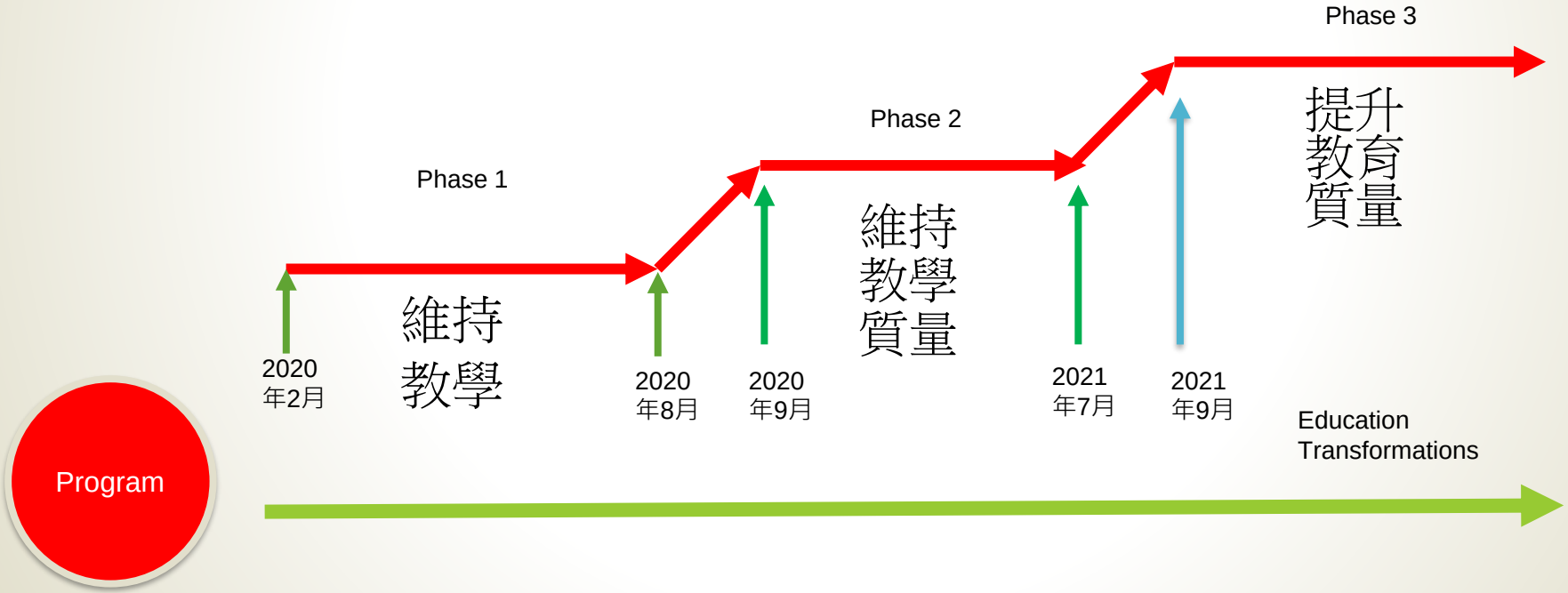
Process





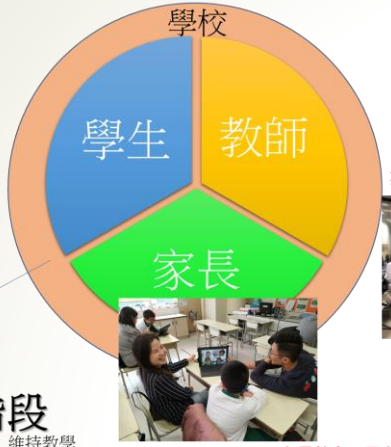
多展示

在**疫情下 JCPS**
混合學習模式轉向



學生培訓

學校 Policy



數碼學習教師專業發展

家長教育、平台操作指引

Phase 1 的階段

維持教學

實時全日製時間表

網課半天時間表

Phase 2 的階段
維持教學質量

第2階段：為了維持教學質量，考慮到課時由40分鐘縮至低小20分鐘及高小25分鐘。因此有效的混合學習模式需要衍生。混合學習模式下的教學法安排如下：

步驟	時間建議	教學步驟	工具
1	60s-180s	Flip Classroom	Edpuzzle
2	5mins	重溫已有知識 及 重點指出學習目標(1項)	PowerPoint
3	5mins	教學內容：講解、闡釋	PowerPoint / OneNote
4	5mins	學生實習：互動	Teams、Padlet、Pear Deck、Nearpod、 StormBoard
5	5mins	釐清學習難點：講解、闡釋	
6	5mins	總結及鞏固：Post Test、功課	Forms、Kahoot! 、 Quizlet 、Wordwall、Flipgrid

整個教學只「一重點」的學習模式，利用反轉教室的模式進行預習→重溫已有知識→講解論點→學生互動討論→釐清概念，解說難點→鞏固→網上評估→反思並重新按學習狀況提供另一天切合的預習　　(ADDIE model of Instructional Design)

Process

Microsoft

Microsoft K-12
Education Transformation Framework

Quick Start Guide

The Microsoft Education Transformation Framework is a guide for education leaders to navigate the complexity of transformation impacting every aspect of their mission. It facilitates the process of envisioning what's possible and developing a strategy to achieve it.

Process

Phase 3 的階段提升教育質量

Student-centered learning

MINECRAFT
EDUCATION EDITION

e-Learning

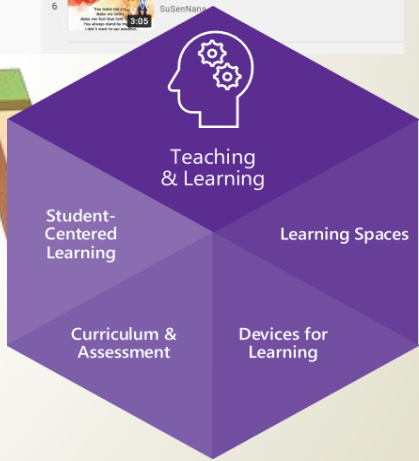
Minecraft Education by Mr Brockie

6 部影片 • 觀看次數：4次 • 上次更新日期：2021年6月1日

Stephen Brockie 訂閱

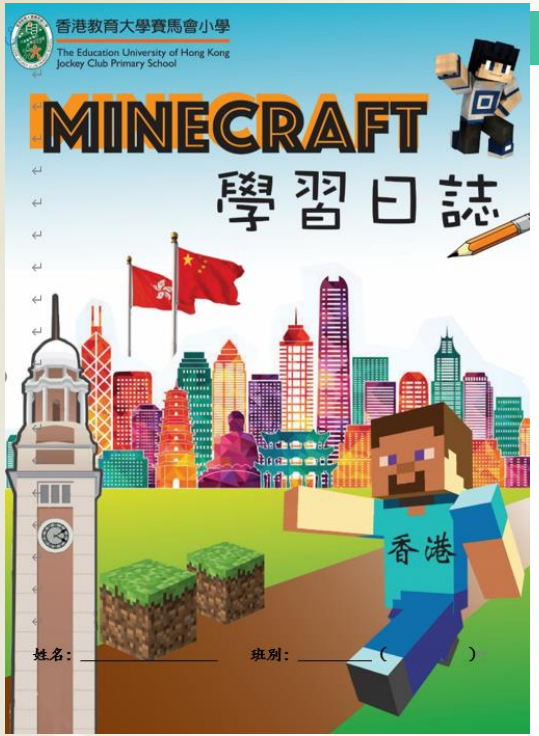
1 Minecraft Education Edition - Movement (1/5) 5:43 Stephen Brockie
2 Minecraft Education Edition - Engagement (2/5 5:43 Stephen Brockie
3 Minecraft Education Edition - Research (3/5) 4:14 Stephen Brockie
4 Minecraft Education Edition - Quiz (4/5) 6:40 Stephen Brockie
5 Minecraft Education Edition - Presentation Idea 2:46 Stephen Brockie
6 A little love by Fiona Fung 3:05 SuSenNana

Self-directed Learning



Program

...nsive Experience Learning



Gamification learning mode

- improves **students' learning intentions and learning effectiveness (Hamalainen, 2008)**
- **develop skills for students to face challenges, develop curiosity, control, compete, cooperate and gain identity** (Prensky.M, 2008),
- **improve problem solving skills** (Papastergiou, 2009; Xiao Xiansheng, Li Zhenying and Hong Yudi, 2009).

GCCCE2021

探討數位遊戲化學習對小學生中國語文寫作動機及能力的影響

An Investigation on the Effect of Digital Game-based Learning on Chinese Writing Ability and the Motivation of Primary School Students

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【摘要】 中文寫作是複雜的思維與認知過程，傳統的寫作教學著重指導寫作技巧、形式的掌握，小學生對寫作表現被動抗拒。Hayes,J.R.(1996)提出的寫作的認知與情意歷程模式指出寫作是寫作環境與個體的結合，教學時應注重社會互動和環境因素。現今小學生身處數碼年代，疫情下的新常態學習模式，學生數碼充權，運用熟習運用數碼科技面對未來的挑戰。本文以五年級學生為研究對象，以數位遊戲「我的世界」(Minecraft)設計教學活動，透過虛擬世界引導學習，探討數位遊戲化學習對小學生中文寫作動機和能力的影響，反思新世代中文寫作教學設計，並提供建議。

【關鍵字】 數位遊戲化學習； 中文寫作； 數碼充權； 寫作動機； 寫作表現

Abstract: Chinese writing involves both the complex level of cognition and thinking process. The traditional strategies of teaching writing emphasize on guided writing skills. Therefore, students feel difficult to do the Chinese writing in a negative way. According to Hayes and J.R. (1996), they pointed out one's cognition and affection in writing reflects the interaction of the writer and the writing environment. Teachers should therefore focus on student-teacher interaction

GCCCE2021 Forum "An Investigation on the Effect of Digital Game-based Learning on Chinese Writing Ability and the Motivation of Primary School Students"

Program

Li… view

Gamification learning mode

e-Learning

Process

Results

Digital gamification learning

- **Strengthens students:**
- **appeal and attention**
- **decision-making ability**
- **ability to memorize and focus in writing**

- Reduce students' memory barriers
- Boost confidence in writing
- **Help up to 80% of students to comprehend content**
- **Overcome writing anxiety**
- "We do not have to imagine the scenes, instead, we could really "go to" the Hong Kong Wetland Park!"
- "I love to learn in this way, as it made writing simpler and funnier!"
- **"I could gather a lot of information in this virtual world!"**

Process

tudents get hands-on experience

e-Learning

Computational Thinking

Computational Thinking education

運算思維

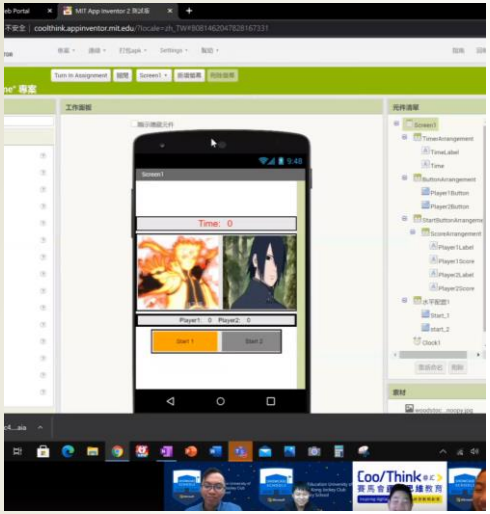
- Computational thinking is the ability to solve problems, innovate, and be a critical thinker.

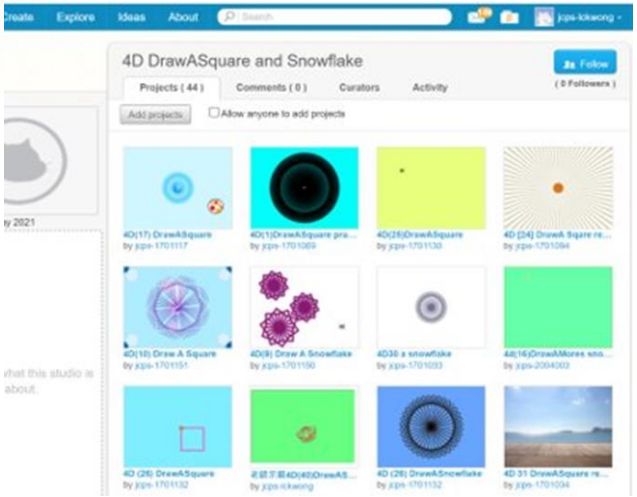
- Concepts of computer science involves understanding of human behavior, system design, and problem-solving.

(Kong, 2016)

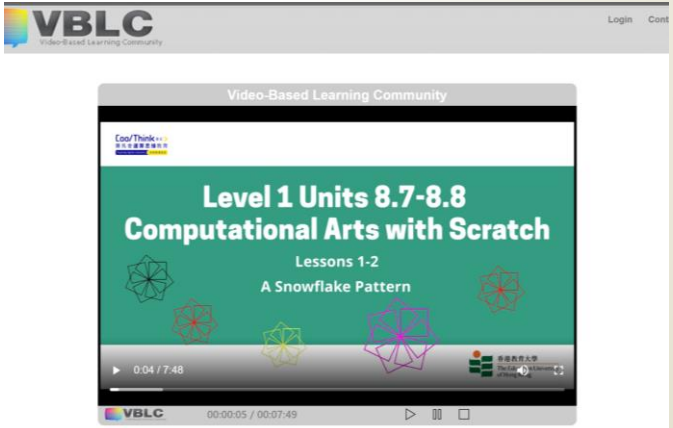
Program

CoolThink@JC
賽馬會運算思維教育
Inspiring digital creativity 啟發數碼創意





Computational Thinking



Process

Learning Outcomes

Coolthink Competition Activities - Campus Restroom System

STEM+ AI

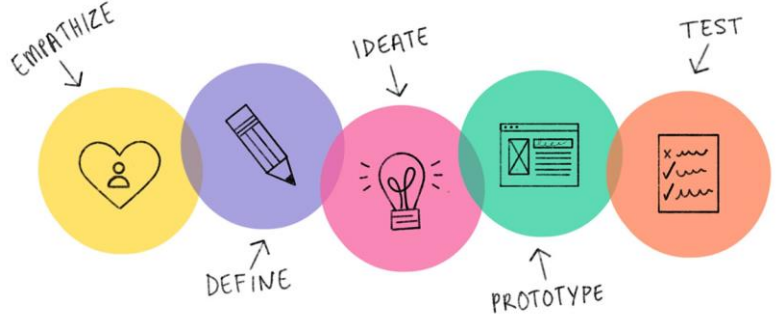
Process

STEM

STEM+ AI

Teaching STEM with Design Thinking

1. establish requirements
2. design solutions with positive optimism
3. peer evaluation
4. optimize with STEM and AI practices



Program

STEM from 2017 -2018

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The Education University of Hong Kong Jockey Club Primary School

Coding in STEM

Coding-in-STEM Moss password machine

Coding-in-STEM traffic light

Coding-in-STEM light sensor box

Optimizing each child's potential through the shared joy of learning and teaching

Program

香港教育大學賽馬會小學
The Education University of Hong Kong Jockey Club Primary School

Code your Microbit

Change the world you live

1:1 micro:bit project at P.4 – P.6

STEM+ AI

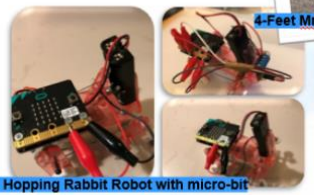
The micro:bit is an educational and creative tool to inspire a new generation of young people. It can be used across the curriculum, not just in STEM subjects. It can help give young people the knowledge and skills to move from being consumers of digital information, to being designers and creators of new tools to enhance learning, to solve problems or just to have fun, enabling them to make the most of 21st Century life and economy.

香港教育大學賽馬會小學
The Education University of Hong Kong Jockey Club Primary School

Micro:bit

Micro-bit car

4-Feet Mrchanical Hopping Rabbit Robot with micro-bit



4-Feet Hopping Rabbit Robot with micro-bit

Optimizing each child's potential through the shared joy of learning and teaching

Under the pandemic...

STEM+ AI

Suspending classes without suspending learning

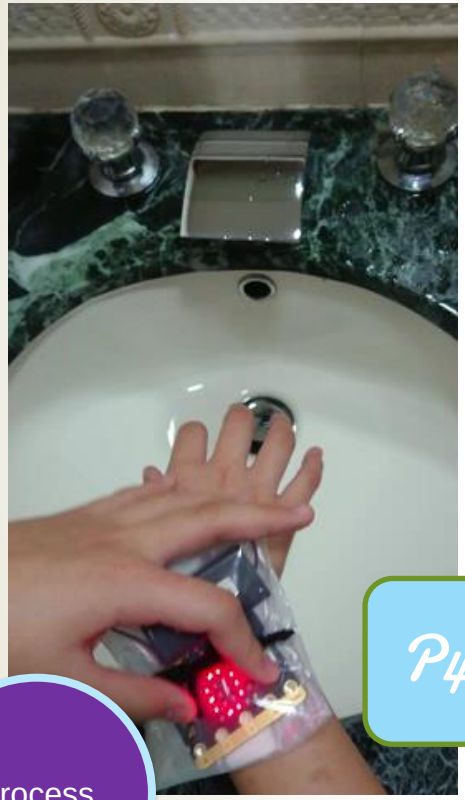
Online STEM Lessons

Process

STEM xPhysical Education
P4 Sit-up Counter

STEM Inventions

STEM+ AI

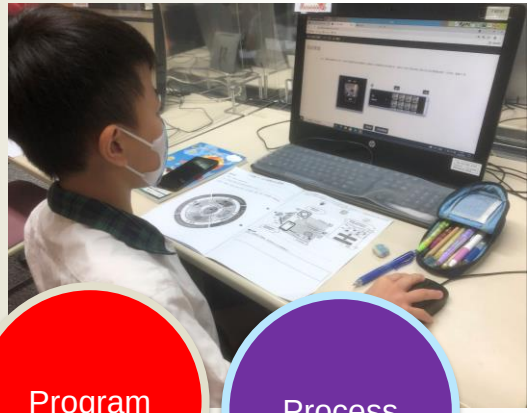


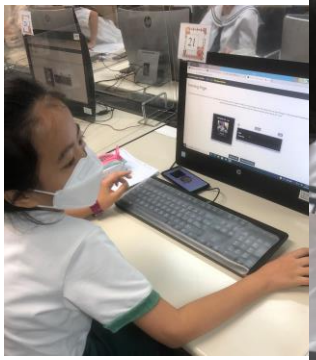
P4 Hand "Watcher"

P5 AI Rubbish bin

Process

AI Lesson



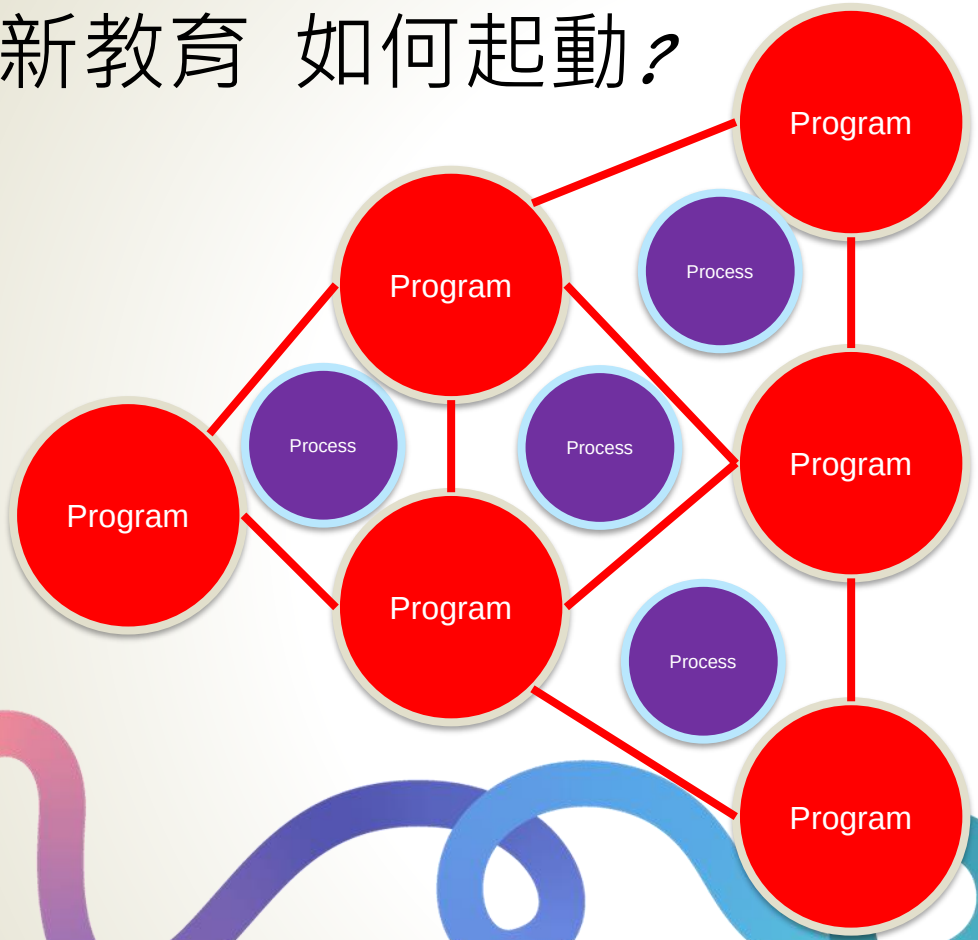


Program

Process

STEM+ AI

創新教育 如何起動?



創新教育力量 fun

20 times e-Learning Practice sharing

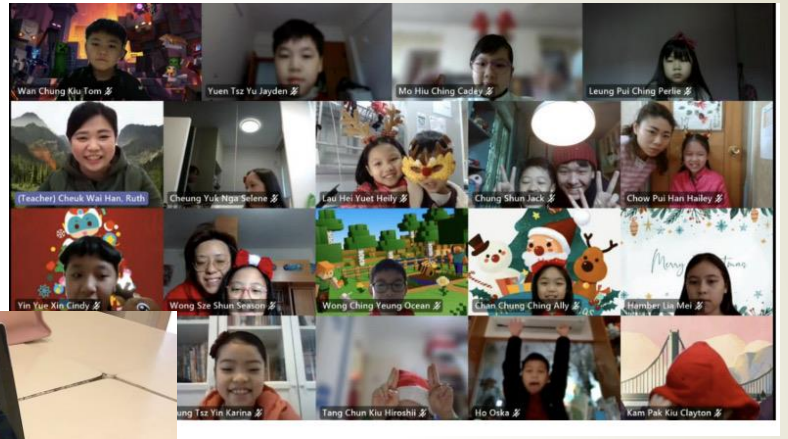
13 Workshops

Lesson Observation

People

Teacher

Continuous Improvement & Culture



Student

People

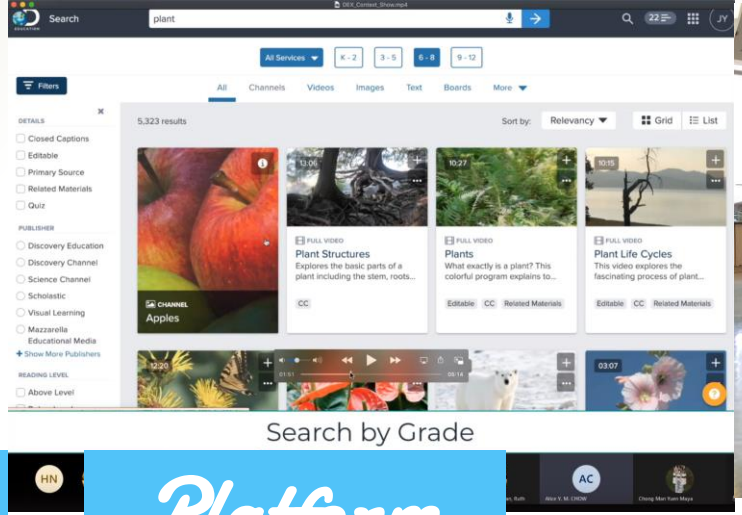
Continuous Improvement & Culture

Parents

People

Continuous Improvement & Culture

Academic Experts



Search by Grade

Platform

Publisher

MIEE

Community Engagement & Partnerships

"Stakeholders should work together to chart the future direction of learning".

Partner

schools universities