



聖公會李福慶中學
SKH LI FOOK HING
SECONDARY SCHOOL

資訊科技教育卓越中心計劃 CoE

聖公會李福慶中學 簡介 及 PDP



CoE 19/20 - PDP

IT in Education Technological Series: Using Google Classroom to Enhance Learning and Teaching Effectiveness in Primary Schools (Basic Level)

資訊科技教育科技系列：在小學課堂運用 Google Classroom提升學與教效能（基礎程度）

IT in Education Technological Series: Using Google Classroom to Enhance Learning and Teaching Effectiveness in Primary Schools (Advanced Level)

資訊科技教育科技系列：在小學課堂運用 Google Classroom提升學與教效能（進階程度）

EI0020190376



嘉諾撒聖心學校教師羅慧中小姐

Miss Law Wai Chung Teacher of Sacred Heart Canossian School

[Link](#)

香港浸會大學附屬學校王錦輝中小學教師胡翠瑜小姐

Miss Wu Chui Yu Teacher of Hong Kong Baptist University Affiliated School Wong Kam Fai Secondary and Primary School



CoE 19/20 - PDP

IT in Education Technological Series: Using Google Classroom to Enhance Learning and Teaching Effectiveness in Secondary Schools (Basic Level)

資訊科技教育科技系列: 在中學課堂運用 Google Classroom 提升學與教效能 (基礎程度)

IT in Education Technological Series: Using Google Classroom to Enhance Learning and Teaching Effectiveness in Secondary Schools (Advanced Level)

資訊科技教育科技系列: 在中學課堂運用 Google Classroom 提升學與教效能 (進階程度)

EI0020190382



[Link](#)



CoE 19/20 - PDP

IT in Education e-Leadership Series: Experience Sharing on Implementation of Innovation Technology on School Library with New Reading Experiences

資訊科技教育電子領導系列：在學校發展創新科技圖書館推展閱讀新體驗的有關經驗分享

29/11/2019 (Fri) & 5/12/2019 (Thu)

14:30 – 16:30

(2 hours)

EI0020190383



[Link](#)



CoE 19/20 - PDP

IT in Education Subject-related Series: Using Mobile Computer Devices Apps to Enhance the Learning and Teaching Effectiveness in English Language Lessons in Secondary Schools

資訊科技教育與學科有關系列：在中學英國語文課堂運用流動電腦裝置應用程式提升學與教的效能

Date: 16/01/2020(Tue)

Time: 14:30-17:00



Docs, Sheets and Slides

Collaborate, share feedback, and work together with your students in real time on documents, spreadsheets, and presentations.



Forms

Create Forms, Quizzes, and surveys to collect and analyze responses with the help of machine learning.



CoE 19/20 - PDP

IT in Education Subject-related Series: Implementing e-Learning to Enhance Learning and Teaching Effectiveness of English Lessons (with Classroom Observation)

資訊科技教育與學科有關係列：推行電子學習提升英文課堂的學與教效能（包括觀課）

Date: 13/02/2020(Thur)

Time: 14:30-15:30



Docs, Sheets and Slides

Collaborate, share feedback, and work together with your students in real time on documents, spreadsheets, and presentations.



Forms

Create Forms, Quizzes, and surveys to collect and analyze responses with the help of machine learning.



CoE 19/20 - PDP

IT in Education Technological Series: Using Virtual Reality and Interactive Games in Learning English

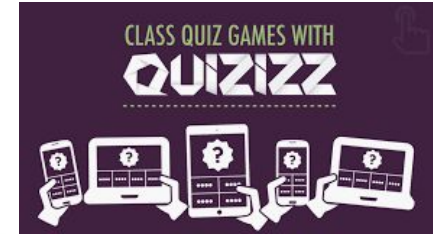
資訊科技教育科技系列:運用虛擬實境及互動遊戲學習英國語文

Date: 06/04/2020(Mon)

Time: 14:30-17:00



Google Expeditions



CoE 19/20 - PDP

IT in Education Technological Series: Using Virtual Reality and Augmented Reality to Enhance Learning and Teaching Effectiveness in Secondary Schools

資訊科技教育科技系列：在中學運用虛擬實境及擴增實境提升學與教效能

26/3/2020 (Thu) 14:30 – 17:00



IT in Education Technological Series: Using Virtual Reality to Enhance Learning and Teaching Effectiveness in Field Studies

資訊科技教育科技系列：運用虛擬實境提升考察活動的學與教效能

2/6/2020(Fri) 14:30-17:00



CoE 19/20 - PDP

IT in Education Technological Series: Using Drones to Enhance Students' Computational Thinking in Secondary Schools

資訊科技教育科技系列：在中學課堂運用無人機促進學生的計算思維

Date: 18/02/2020(Tue)

Time: 14:30-17:00



STEM

SCIENCE - TECHNOLOGY - ENGINEERING - MATH

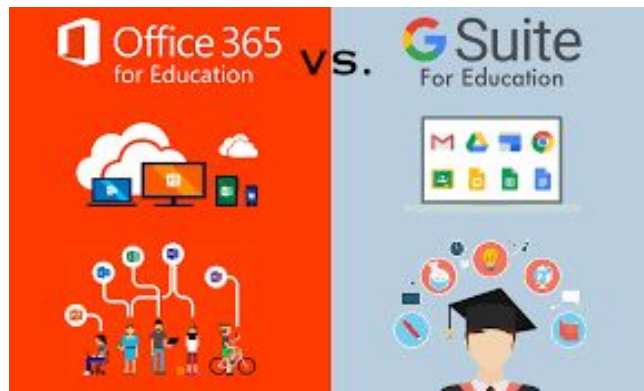


CoE 19/20 - PDP

IT in Education e-Leadership Series: Experience Sharing on Planning and Implementation of e-Learning with Cloud Platform in Secondary Schools
資訊科技教育電子領導系列：在中學規劃及推行雲端平台電子學習經驗分享

Date: 23/4/2020(Thu)

Time: 14:30-17:00



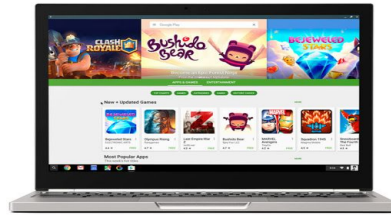
CoE 19/20 - PDP

IT in Education e-Leadership Series: Practical tips for IT admins in deploying tablets and/or Chromebook devices in schools

資訊科技教育電子領導系列: 如何在學校部署電子學習裝置(Chromebook)的實用技巧

Date: 12/06/2020(Fri)

Time: 14:30-15:30



 chromebook

Simple Affordable Secure Shareable





◆ 陳俊銘老師

資訊科技科 (IT/ICT), 通識科, 數學科

資訊科技統籌員 / 電子學習負責人

MVT, MSIE, Google Certified Trainer,

Apple Teacher in iPad&Mac, VR/AR, eLearning,

etc...





❖ 許小紅老師

英文科

資優教育組 負責人

**Google Classroom, English Central, Book
Creator, Nearpod, Kahoot, VR Immersive
Learning, AR eLearning**



學校簡介

- ❖ **創辦於1996，位於香港柴灣的一間津貼男女中學。**
- ❖ 1999 成功申請資訊科技統籌員計劃
- ❖ 2000 資訊科技研習室協助推行實用設計教育 (1999/2173)
- ❖ 2001 多媒體學習語言學習中心 (2000/1326)
- ❖ 2001 新世紀的物理教學 (2000/1328)
- ❖ 2001 「數碼橋」計劃



學校簡介

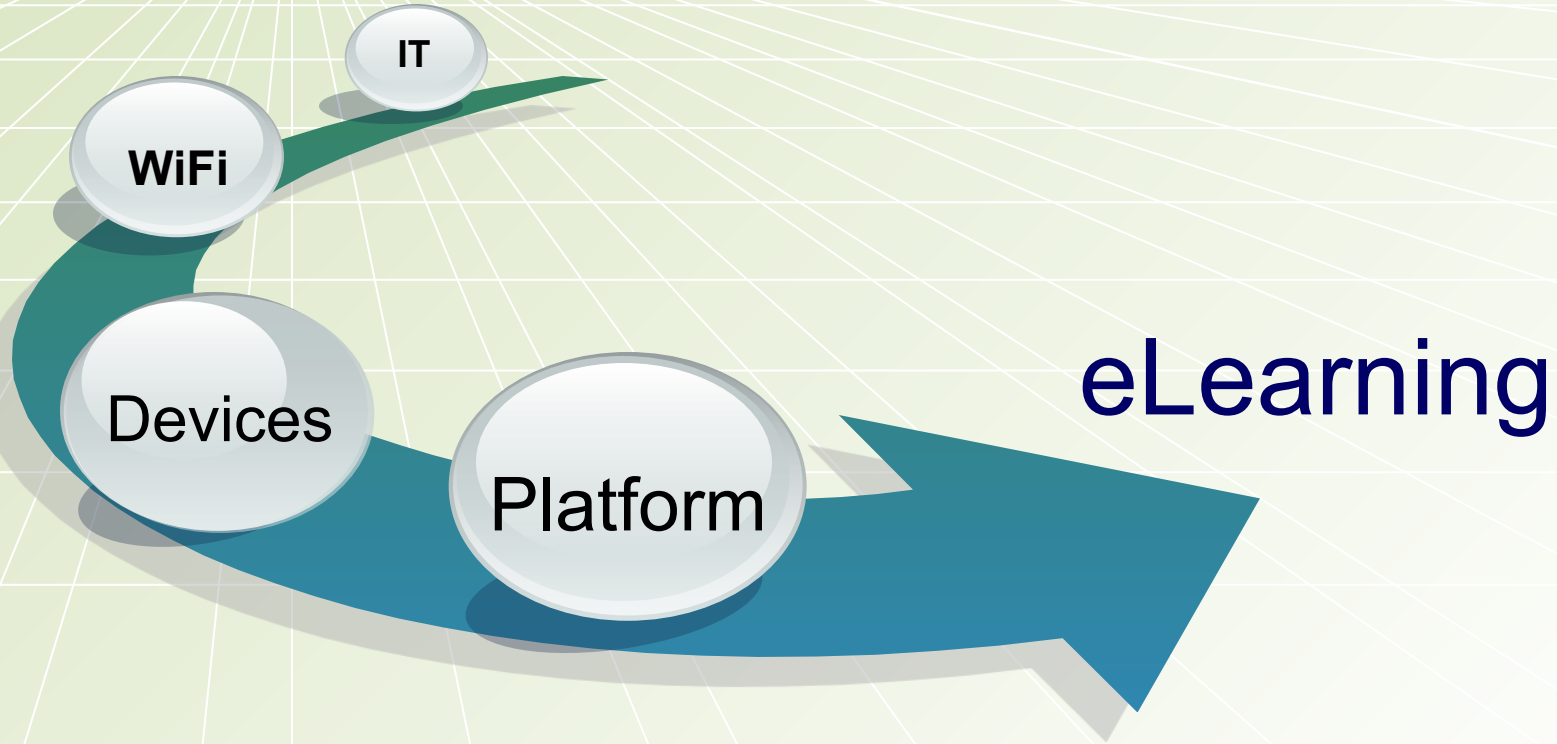
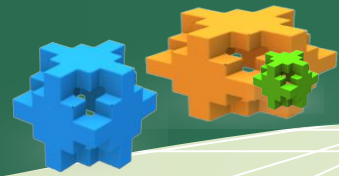
- ❖ 2002「數碼橋」計劃
- ❖ 2002 全體教師達致了教統局所訂的資訊科技能力要求，其中更有超過八成教師達致中級或中上級程度
- ❖ 2005 全校各課室配備電腦及投影設備，SIP建設新的電腦室及語言學習室
- ❖ 2008 各特別室及中一課室加設互動電子白板
- ❖ 2009 OGCIO及青協 互聯網教育活動計劃「做個智net的」



學校簡介

- ❖ 2010 學校網絡基建骨幹網絡提升至10Gbps
- ❖ 採用香港學校網絡(SchoolNeT) School Wall Services
- ❖ 2012 為學校禮堂及部份特別室配置無線網絡服務
- ❖ 2012 先導學校使用香港大學合作開發的iClass互動學習平台
- ❖ 2013 善用數碼校園電視台發展學生多元智能 (2012/0024)
- ❖ 2014 三星智能教學體驗計劃 (Samsung Smart School)
- ❖ 2016 香港教育城 VLE 先導學校





資訊科技學習環境

- ❖ All Teachers 1:1 All-in-One Desktop Computer in Staff Room (2008)
- ❖ Starting @lfh.edu.hk as Google for Education (2009)
- ❖ Single Sign On (SSO) for all accounts in Campus
- ❖ FileServer with 2 Factors Auth / VPN - **Admin & TestExam**
- ❖ Promoting the Cloud services with the use of Google Team Drive - **Subject (Teaching & Learning)**
- ❖ Google Calendar (Official) - School & Teacher



資訊科技學習環境

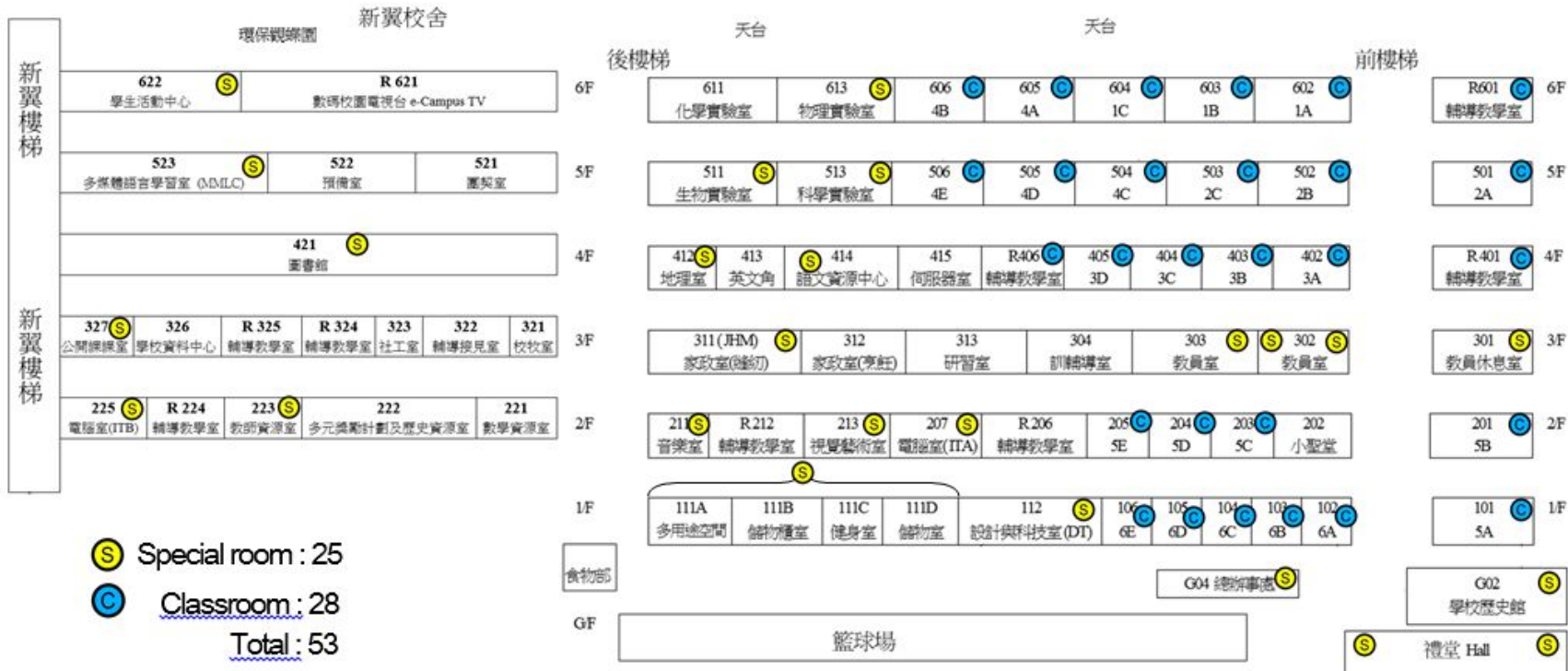
- ◆ 校內電子學習小組，統籌及推行校本電子學習計劃(2015)
- ◆ 持續更新學校教職員 IT Manual → Google Sites



- ◆ 第四個資訊科技教育策略 - 加強學校無線網絡基礎設施
全校無線網絡覆蓋共54部，符合政府數碼21策略



WiFi 900b



資訊科技學習環境

- ◆ 虛擬化技術綜合虛擬伺服器 **Server Virtualization** (2013)
- ◆ 學校中央電腦系統軟件管理
Microsoft System Center Configuration Manager(SCCM)
(2016)
- ◆ 善用電子學習一筆過資訊科技津貼(OITG)提供全級**中一學生一人一部流動電腦設備** (2017)
- ◆ 全校所有課室教師桌面電腦虛擬化技術
Virtual Desktop Infrastructure (VDI) (2018)



學校資訊保安

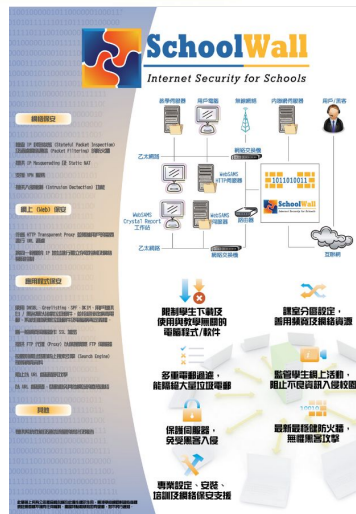
最不顯眼但最重要：

- 學校資訊保安建議措施 (2019-01)
- 網絡安全基礎的鐵三角
(防火牆、防毒軟體及系統更新)



Ransomware
Paradise
All your files have been encrypted!

All your files have been encrypted. Ask to a security professional help your file. If you want to receive them, write us in the e-mail: info@paradise.rn
Write the ID in the title of your message: SPFA82X.
You have to pay for decryption in Bitcoins. The price depends on how long you write us.
After payment we will send you the decryption tool that will decrypt all your files.



SchoolWall
Internet Security for Schools

● 限制學生外聯區，使用與教學無關的電腦程式/軟件
● 多層電腦過濾，能隔絕大量垃圾電郵
● 保護校園網，免受病毒入侵
● 專業設定，安裝、培訓及網絡保安支援

● 提高分機設定，應用網頁及網絡過濾
● 監督學生網上活動，防止不良網頁入侵校園
● 最新最穩健的引擎，無懼病毒攻擊



V2 Version 2
www.eset.com 2 版



學校設備

- **eLearning - Booking of Tablets (iPad, Android, Chromebook)**
- Microsoft Surface RT Tablets, Samsung Galaxy Note 10.1 (Android) , Apple iPad, Chromebook
Reservation by Google Form (Should be a day before)
- **Chromebook for Whole S1 Students** starting at 2017

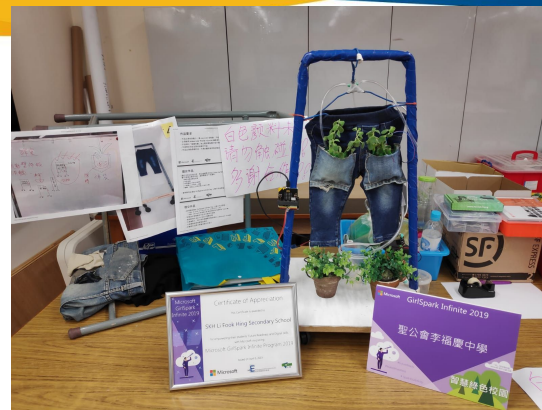


創新科技學習環境

- ◆ D&T Rm 改建 為STEM特別室及設備
全港首間先導學校採用超寬屏融合激光互動畫面(4mX1.3m)
- ◆ 中華文化室 新穎課室電子教學設備 前後電子教學互動空間
- ◆ QEF DFP 嶄新圖書館設備以推動閱讀新體驗 (2018/0050)
優質圖書館Library 3.0及 VR AR 作閱讀推廣



STEM Rm



中華文化室





過去 ...

2010 優質教育基金 運用新科技處理學校行政工作

2016 教育局 加強學校行政管理津貼



HKT
Education



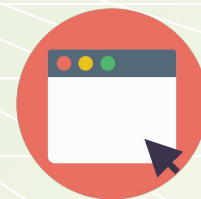
eClass



myIT-School.net



myID Limited



內聯網

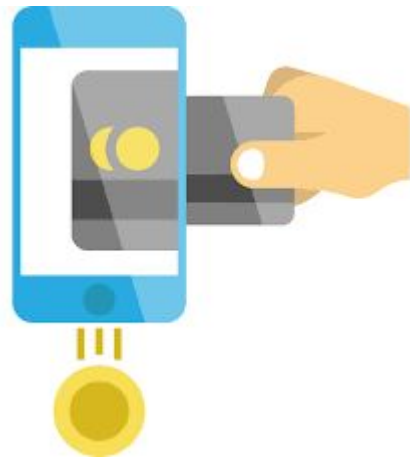
Intranet eClass

- 考勤系統
- 電子繳費
- 資產管理
- 學生學習概覽



聖公會李福慶中學

- ❖ 家校溝通
- ❖ 學生考勤及請假
- ❖ 電子通告
- ❖ 電子即時繳費支付



多元化繳費渠道



eDocument



Google Drive



❖ Online document hosting and collaboration

Agenda , Minutes , Reports

→ **Editing & Circ**



Collaborate on docs.

Create and edit docs, spreadsheets, and presentations right in your browser.
Multiple people can work at the same time, and every change is saved automatically.

Google SharedDrive - FileStream



雲端硬碟

新增 TRANSFER TO CLOUD

- 我的雲端硬碟
- 小組雲端硬碟
 - GoogleService
 - ITCommittee
- 電腦
- 與我共用

搜尋雲端硬碟

Google Drive

我的雲端硬碟 > 00 - GuestSpeaker ▾

設定

下載雲端硬碟檔案串流 Windows 版

鍵盤快速鍵

說明

本機 > Google Drive File Stream (G)

- 本機磁碟 (C:)
- Google Drive File Stream (G)
 - \$RECYCLE.BIN
 - 小組雲端硬碟
 - 我的雲端硬碟
 - 00 - CPD
 - 00 - GuestSpeaker
 - 00 - ITC_Test_grading_kit
 - 00 - Seminar
 - 00 - SpeakerPhoto
 - 99 - EDB
 - 1718 - OpenDay-LS

本機 > Google Drive File Stream (G) > 我的雲端硬碟

名稱	修改日期	類型
00 - CPD	9/6/2017 14:47	Adobe Acrobat ...
00 - GuestSpeaker	5/6/2017 11:31	Google 文件
00 - ITC_Test_grading_kit	5/6/2017 11:31	Microsoft Word
00 - Seminar	13/5/2017 15:25	Google 文件
00 - SpeakerPhoto	9/5/2017 15:16	Google 試算表
99 - EDB	5/5/2017 15:16	Google 文件
1718 - OpenDay-LS	25/4/2017 15:13	Google 試算表
201802-WuHanLunarNewYearTrip	28/3/2017 13:47	Google 文件
20171212-EDB-MicrosoftTEAM	23/3/2017 10:08	Adobe Acrobat ...
CardBoard	20170325-Teacher-EDB-CTM.pptx.gsl...	Google 簡報
Classroom	Form - EES-WAH-Accept.gdoc	Google 文件
Completed	Form - EES-WAH-Accept (1).gdoc	Google 文件
CTM	Form - EES-WAH-Accept (2).gdoc	Google 文件
Google Form2Calendar	eLearning.gdoc	Google 文件
ICT PAST PAPER	16001_中一級學生管理午餐計劃 - Temp...	Google 文件
ITCommittee	20170301-LS-S4D-課程教案.docx	Microsoft Word
Projector	Mail Merge for Batch Email (v3.31).gsh...	Google 試算表
Sample - S1 - IT	WinFax902_CHT.rar	RAR 檔案
Screencastify	201802-WuHanLunarNewYearTrip	檔案資料夾
	Testing	檔案資料夾
	20171212-EDB-MicrosoftTEAM	檔案資料夾



eTeaching & eLearning



地圖



新聞



Classroom

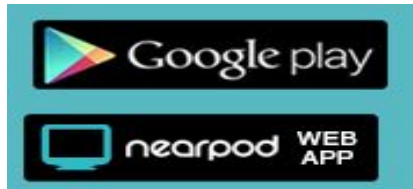
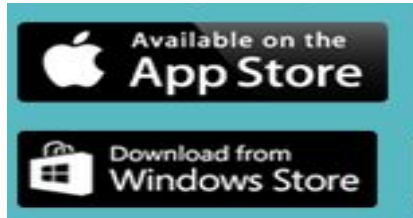
eLearning tools



Account in Cross Platform (跨平台應用帳戶)



Download



SingleSignOn

Join a Session

Login



Direct Connect

Share this PIN with your audience

UIWFL



單一用戶登入 SingleSignOn (Internet)



Join a Session

ENTER PIN



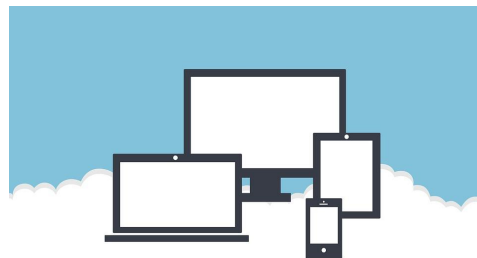
Login

 with Nearpod

 with Google

 with Office365

Sign up



- 登入帳戶有助確保學生的網絡帳號身份，讓教師在進行學習過程及評估上更容易識辨學生的身份。
- 跨平台/應用軟件 隨時隨地隨裝置 **存取**

Walking on two legs 兩條腿走路 ...



Cloud Account

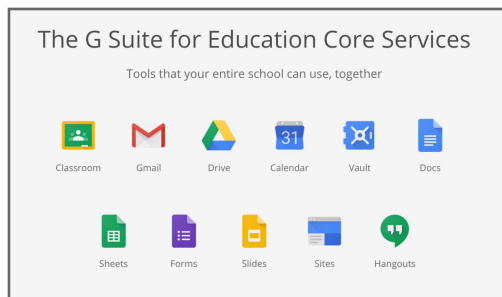
Google Apps for Education

- 學生証編號@lfh.edu.hk



Microsoft Office 365

- 「微軟電子郵件地址」: 學生編號@ms.lfh.edu.hk



Microsoft EES



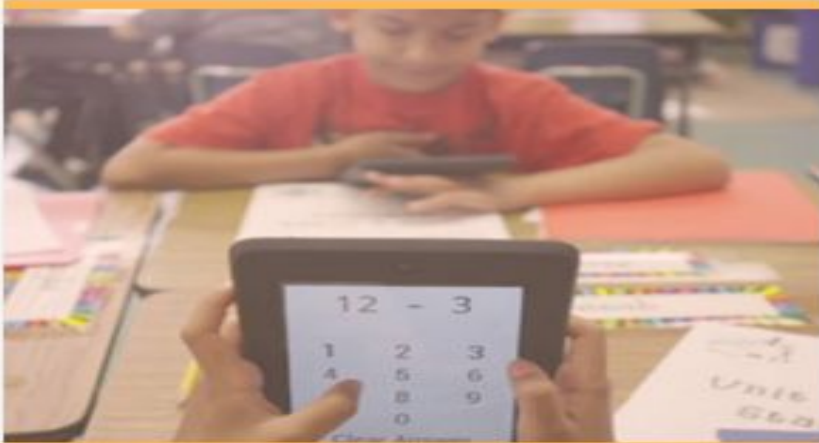
Microsoft EES

- ◆ Microsoft Windows 10 ...
- ◆ Microsoft Office 2016 or above
- ◆ Work At Home Rights (WAH)
 - Staff with Office License at home
(For details will be released by Email)



- ◆ Staff assigned computer can be choice to **upgrade** latest version of **OS or Office** from our TSS.

Google on teaching & learning



CLASSROOM

Create assignments
paperlessly and stay
organized.



DEVICES

Get laptop
that are af
easy to manage.





chromebook

Simple



Affordable



Secure



Shareable



Device Management



≡ 裝置管理

≡ 裝置管理 > 行動裝置



搜尋

核准

封鎖

遠端清除

清除帳戶

刪除

全部匯出

行動裝置報告



第 1 - 14 項，共

裝置設定

網路

Chrome 管理服務

Chromebox 視訊會議解決方案

手機

設定

密碼設定

Android 設定

iOS 設定

進階設定

裝置核准

應用程式管理

<input type="checkbox"/>	裝置 ID	名稱 ▲	電子郵件	型號	作業系統	類型	上次同步處理時	狀態
<input type="checkbox"/>			85@lfh.edu.hk	SM-P600	Android 4.4.2	Android	16/2/26	已核准
<input type="checkbox"/>			44@lfh.edu.hk	SM-G9200	Android 5.1.1	Android	15/12/13	已核准
<input type="checkbox"/>			37@lfh.edu.hk	GT-N7105	Android 4.4.2	Android	15/12/6	已核准
<input type="checkbox"/>			22@lfh.edu.hk	D6653	Android 5.1.1	Android	16/2/28	已核准
<input type="checkbox"/>			09@lfh.edu.hk	SM-A5000	Android 5.0.2	Android	16/2/27	已核准
<input type="checkbox"/>			85@lfh.edu.hk	SM-A8000	Android 5.1.1	Android	16/2/29	已核准
<input type="checkbox"/>			37@lfh.edu.hk	GT-I8552	Android 4.1.2	Android	15/11/18	已核准
<input type="checkbox"/>	3580..d86750							已核准



SM-P600

名稱:

電子郵件:

裝置 ID:

硬體 ID:

第一次同步處理時間:

上次同步處理時間:

3580..d86750
85@lfh.edu.hk
37415de5eaaceb1e
4300804c974941d1
15/11/26 下午2:12
16/2/26 上午11:10

核准

封鎖

遠端清除

清除帳戶

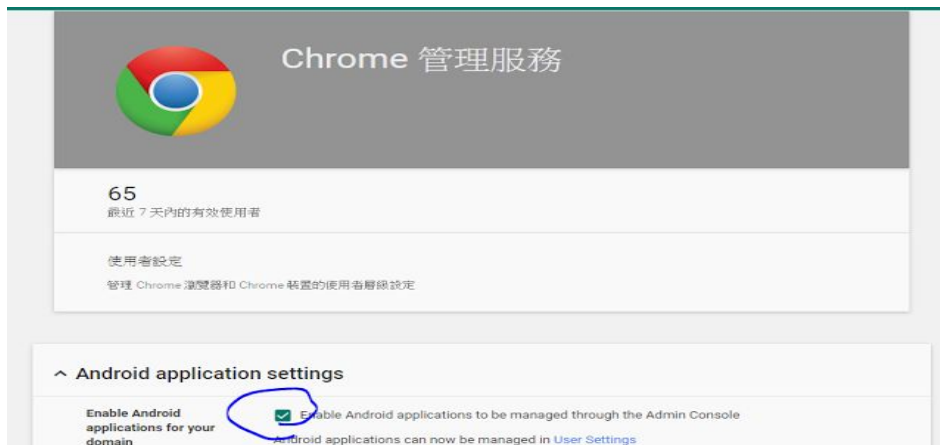
刪除

查看詳細資訊

Device Management



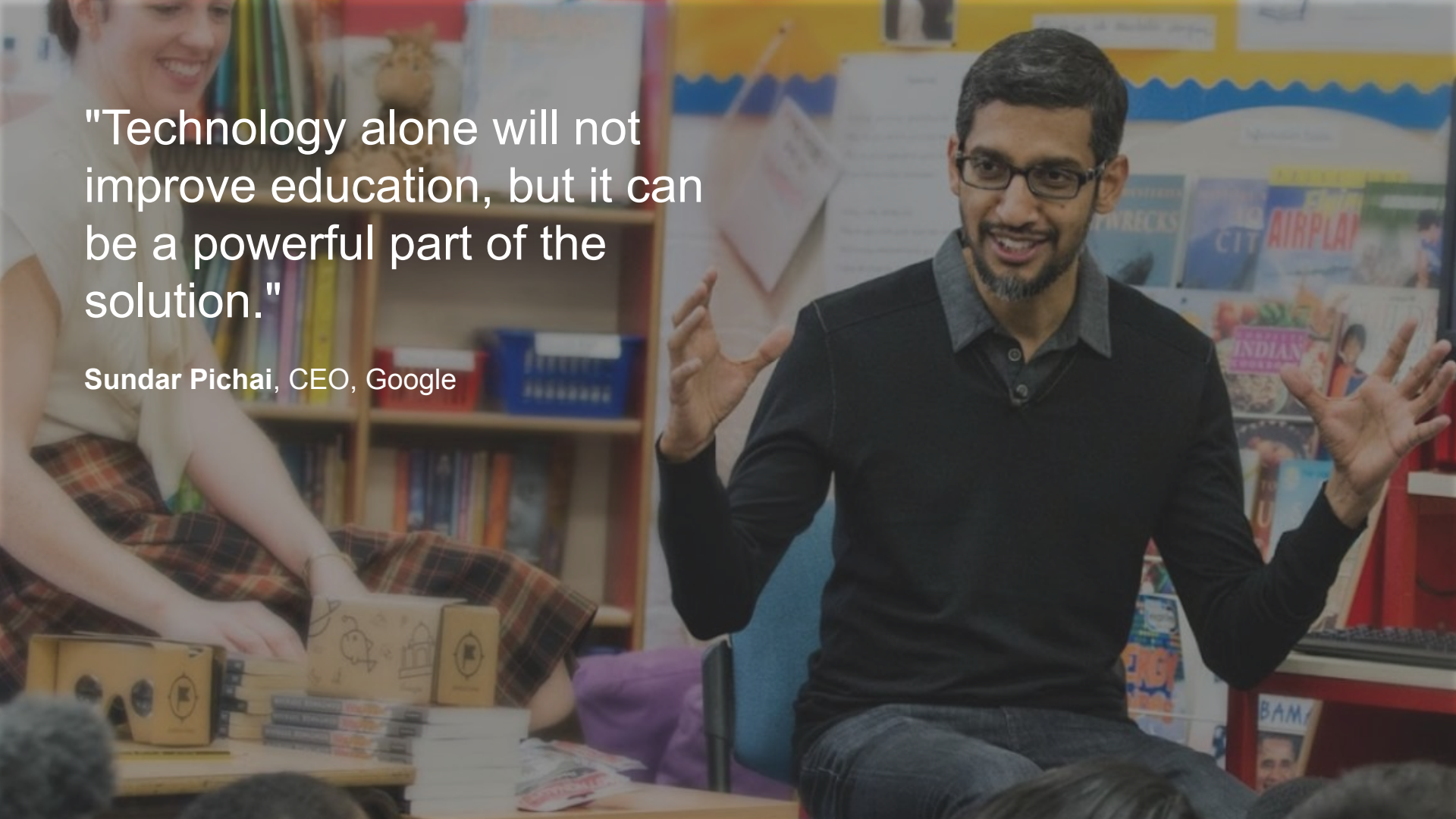
Chromebook -使用Google教育帳號登入時即可在Chrome OS使用Android (個人帳號之前已啟用), 學校需開啟校園網域內的Android Play Store服務並一致管理。



G Suite




- Foster collaboration with G Suite for Education
- Save time and stay organized with Google Classroom
- Engage students with digital tools
- Empower teachers, built more autonomy in students

A photograph of Sundar Pichai, CEO of Google, sitting in a classroom. He is wearing a black sweater over a grey collared shirt and glasses. He has his hands raised in a gesture of explanation or enthusiasm. To his left, a woman in a white top and a plaid skirt is leaning over a table, organizing stacks of cardboard boxes and books. The background shows a bookshelf filled with books and educational posters on the wall, including one titled 'INDIAN' and another with 'AIRPLAY'. The scene is brightly lit and appears to be a school environment.

"Technology alone will not improve education, but it can be a powerful part of the solution."

Sundar Pichai, CEO, Google

A young boy in a blue school uniform is smiling and holding a cardboard VR viewer over his eyes. The viewer is decorated with various icons including a fish, a lightbulb, a building, and a sailboat. The word "Google" is printed on the bottom right of the viewer. In the background, another child is also using a similar cardboard viewer. The scene is set in a classroom with educational posters on the wall.

We believe
technology
is a tool

Google of Education



Manage teaching and learning with Classroom

Classroom helps students and teachers organize assignments, boost collaboration, and foster better communication.



Use your favorite apps with Classroom

Thousands of educator-approved apps integrate with Classroom. These apps spark creativity and create endless opportunities for learning.

[See all](#) →



APP

Classcraft

Make learning fun with Classcraft. Classcraft's gamification assists with classroom management. Teachers can import students from Classroom into Classcraft and make Classroom assignments "Quests" as part of the game.



APP

Pear Deck

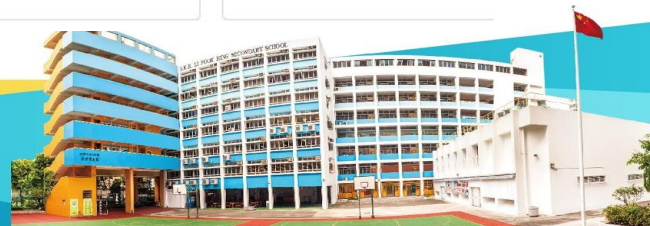
Pear Deck is a presentation platform that promotes active engagement. With Classroom, teachers can easily connect all of the room's devices in an interactive lesson without the need for codes or long URLs.



APP

Quizizz

Quizizz allows you to conduct student-paced formative assessments in a fun and engaging way. Teachers can assign Quizizz games to individual students—who can join a game with just one click. All student performance data is sent back to Classroom.





Docs, Sheets and Slides

Collaborate, share feedback, and work together with your students in real time on documents, spreadsheets, and presentations.



Forms

Create Forms, Quizzes, and surveys to collect and analyze responses with the help of machine learning.





聖公會李福慶中學
SKH LI FOOK HING
SECONDARY SCHOOL

STEM 教育



STEM

SCIENCE - TECHNOLOGY - ENGINEERING - MATH



教學推展的模式

1. 全面融入課程的教學模式
2. 部份整合的專題研習模式
3. 結合學科的課外活動模式

活動模式

- 探究體驗(Experiencing)
- 綜合學科(Integrative)
- 創新科技(Innovative)



STEM Education - 課外活動(校內)

VR Cardboard – 課堂 □ 開放日



STEM Education - 課外活動(校內)

VR Cardboard □ 校園體驗日



STEM Education - 課外活動(校外)

VR Cardboard 到訪小學



聖公會李福慶中學
SKH LI FOOK HING
SECONDARY SCHOOL

STEM 多元學習工作坊

Science
Technology
Engineering
Mathematics

參與學校將獲贈
HKT Education 紀念品：
首10間認證舉辦工作坊的
學校將獲贈HKT Education
Cardboard Pro VR
Viewer乙部。

為推廣STEM教育，
本校誠意邀請東區小學參與「STEM多元學習工作坊」，
由本校學生大使帶領及講解，
讓學生認識及體驗 虛擬實境(Virtual Reality (VR))，
啟發學生對生活中科技應用的探究精神，
提升他們對學習數理與科技的興趣！
如有查詢，請與沈相誠老師聯絡(電話：2560 5678)。

贊助機構：
HKT Education

地址：香港葵涌葵海邨翠海閣聖公會李福慶中學 電話：2560 5678 網址：www.lfhs.edu.hk



STEM in Google VR Cardboard

讓學生了解虛擬實境Virtual Reality (VR) 技術的數理概念，自行製作Google Cardboard，並體驗虛擬實境的震撼。

作為一個校本的STEM課程活動，能推動突破傳統教學模式，透過VR模擬不同環境，讓學生進行經歷為本的學習模式，促進互動，啟發創意潛能，提升



STEM in Google VR Cardboard

★ Open School: STEM 教案比賽 2017 中學組 優異獎

<http://v1.openschool.hk/stem2017>

★ 全球華人計算機教育應用大會GCCCE 2018 教師論譚文章

★ 香港教師中心傳真第92期Hong Kong Teachers Centre

Bulletin Issue No.92 STEM教育P.12-13

中學組得獎名單

中學組

得獎學校	得獎教師	得獎作品
冠軍 博愛醫院陳惜紀念中學	鄭麗娟老師	極速飛馳橡皮筋車大賽
亞軍 福建中學	周國良老師、王漢輝老師	飛魚大作戰 -- 跨學科學習工作坊
季军 聖公會基孝中學	劉子健老師	STEM起來做STEM專家-----創意增潤課程
優異獎 中華基督教會基康學院	盧遠志老師	中三級物理校本STEM課程
優異獎 祐德宮中學	劉毅恒老師、陳上海副校長、陳科寧老師、 陳耀聖老師、黎志偉老師、謝栢志老師、 鄧志良老師	挑戰人生，創意飛行
優異獎 伯靈書院	張木意老師、陳友蘭老師	創意組專題車大制作
優異獎 廣福山中學	歐川康老師	手作飛碟小車
優異獎 聖公會主恩堂中學	陳偉強老師	STEM with VR Google Cardboard
優異獎 培基三級課程發展中心	楊國輝老師	挑戰組別 (Advanced) 挑戰 (Challenge)

教師中心傳真

Hong Kong Teachers' Centre Bulletin



STEM 與雲端工具學界的實踐

前言

現時正值學界大力關注推動 STEM 教育，教育局更已撥款一筆過津貼，給所有官立、資助和直資小學作推廣 STEM 教育。但推動 STEM 教育方面，香港仍處於萌芽階段，要作持久長遠的發展，必須靠前線教師的支持和努力。不少國家已把 STEM 整合貫通，積極發展 STEM 教育。各國均意識到 STEM 教育將能帶來創新科技知識，是培訓人材、提升競爭力之關鍵，繼而撥款不少資源以優化這四個目標的協作。香港亦由過去的學習科學、實踐科學、學習科技，到現在掌握及實踐科技，冀望培育更多專業科技人才，提升香港的競爭力。因為這正是國際公認的未來競爭力指標。

近年談論 STEM 的理論及文章著實不少，作為前線工作者，探討及分享其實踐的例子更重要。記得有同工一語到 STEM 一詞時，首覺認為只是普通新術，只是給填。我個人認為 STEM 是一個架構，一個學習模式的轉變，更是一個新的規範。STEM 教育是一種跨理科的專題應用學習，訓練學生的探究、協作和解決能力，發揮創意及創新潛能，這也正是未來社會所需要的。對學校管理層來看，

eLearning - VR

HKU eLearning Development Laboratory

International Outstanding e-Learning Awards

國際傑出電子教學獎 2018 Merit Awardee on e-Learning application in History

(<http://iclass.hk/doc/elearningaward2018.pdf>) P.84

教師: 莊少靜及陳俊銘



S.K.H. Li Fook Hing Secondary School



eLearning - VR

2018年學與教博覽會 21世紀教室講者
應用虛擬實境-以探究體驗模式學習戰爭史
(Using VR for Exploratory Learning in War History)
教師：莊少靜及陳俊銘





聖公會李福慶中學
SKH LI FOOK HING
SECONDARY SCHOOL

Thank you! Supporting!

