聖公會聖馬利亞堂莫慶堯中學
SKH St. Mary's Church Mok Hing Yiu College

在中學進行電子學習的學校規劃及應用電子學習資源經驗分享

聖公會聖馬利亞堂莫慶堯中學

劉安立　　李天民

流程表

9:30 – 10:00	如何開展電子教學
10:00 – 10:45	雲端怎樣提升教與學效能
10:45 – 11:00	小休
11:00 – 11:30	從雲端到課室
11:30 – 12:10	Bring Your Own Device (B.Y.O.D.)的考慮
12:10 – 12:30	問答環節

I.T. in Education

校本開發一站式行政管理系統

SKH ST. MARY'S CHURCH MOK HING YIU COLLEGE
STAFF INFORMATION
LOGIN: LiTienMan [CLICK HERE TO LOGOUT]

A MAILS AND NOTICES
1 MAILS (221)
2 NOTICES (27)
3 SCHOOL ACTIVITIES
4 PHOTO GALLERY

B STUDENTS AFFAIRS
1 ATTENDANCE
2 CONDUCT
3 UNIFORM
4 NOTICES TO PARENTS
5 HOMEWORK RECORDS
6 B. L. A. AWARDS
7 L. G. A. AWARDS
8 PREFECTS NOMINATION
9 BEST CONDUCT STD. NOM.
10 SUMMARY REPORT

B STUDENTS AFFAIRS
11 SLP
12 S4 ELECTIVES
13 SPORTS DAY EVENTS REG.
14 MINI-APASO
15 SP XPRESS
16 Further Studies & SLP
17 ... Adm Tools

C DOCUMENTS
1 SECTIONS DOCUMENTS
2 TEACHERS' FILES
3 SEARCH DOCUMENTS

D BOOKINGS
1 AV EQUIPMENT
2 ROOMS
3 LAB EQUIPMENT

E TEACHERS AFFAIRS
1 USEFUL LINKS
2 WELFARE FUND
3 PD HOURS
4 WISERS LOGIN
5 EDB TRANING CALENDAR
6 CHANGE PASSWORD

EVENT(S) OF TODAY (13/1/2016, WED):

9:00-17:00 / 中一自行分配學位申請 / 學生活動中心 / 龔、Anita、Yuki

© SKH St. Mary's Church Mok Hing Yiu College

Self
Actualisation
Esteem
Social Needs
Safety And Security
Physiological Needs
WiFi
Battery

二零一六年施政報告

- 施政報告
- 施政綱領
- 重點
- 網上廣播
- 新聞稿
- 電視宣傳短片
- 其他宣傳品
- 資料庫
- 聯絡我們
- 網頁指南

施政報告

中小學教育

190. 政府將繼續為公營中小學建立無線網絡校園及購置流動電腦裝置提供財政支援。全港已有一半公營學校完成相關工程。

191. 新學制高中階段的中期檢討已經完成，政府亦積極推動生涯規劃教育。為優化高中課程的推行，以及加強生涯規劃教育與相關輔導服務，由2016/17學年起，學校可將現行的「高中課程支援津貼」及「生涯規劃津貼」轉為常額教席，預計可提供額外約1 000個學位教師職位。我們會在未來兩個學年檢討學校的推行情況。

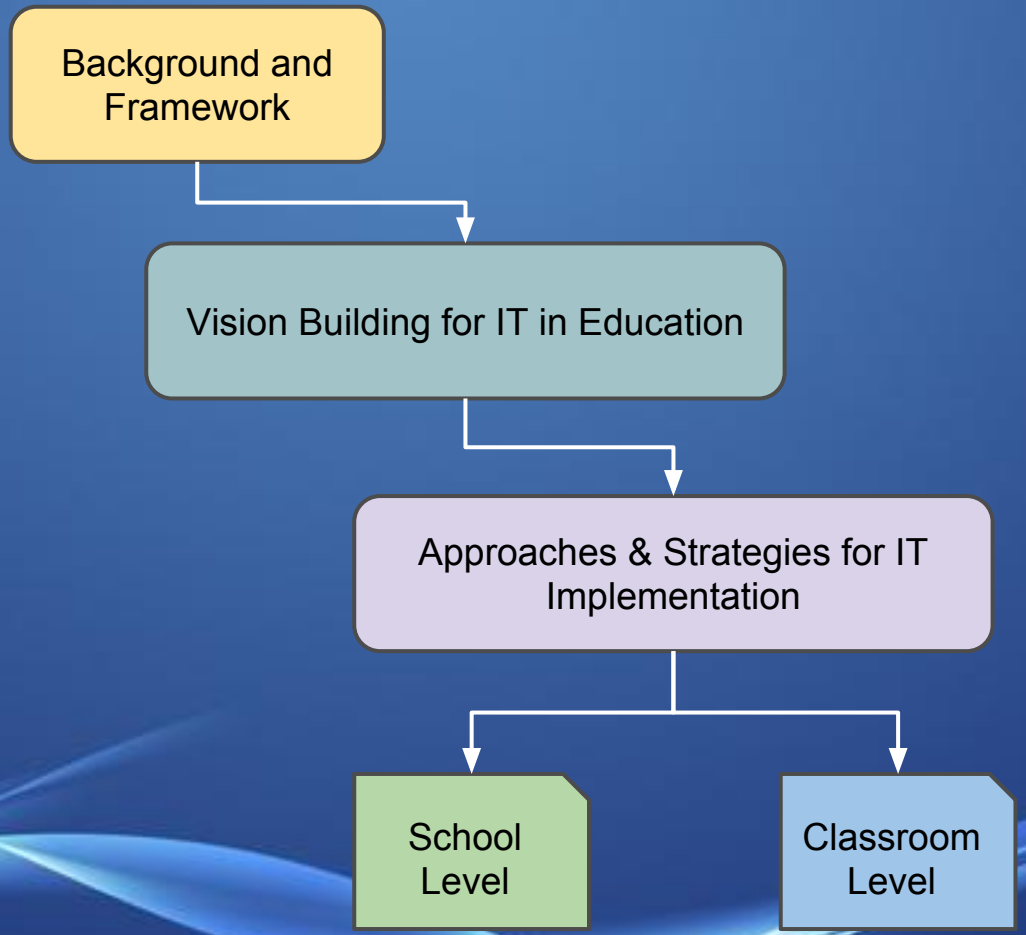
「不少學者對資訊科技應用於教育上持正面的態度，認為有了資訊及通訊科技，學生學習能事半功倍。」

Pachler, N. (1999). Theories of learning and ICT. In M. Leask & N. Pachler (Eds.), Learning to teach using ICT in the secondary school, London, Routledge

Rosas, R., Nussbaum, M., Cumsille, P., Marianov, V., Correa, M., & Flores, P., et al. (2003). Beyond nintendo: Design and assessment of educational video games for first and second grade students. Computers and Education, 40(1), 71-94

「你對應用資訊科技應用於學校學與教上持正面的態度，認為有了資訊及通訊科技，行政工作能事半功倍。」

「你對應用資訊科技應用於學校行政管理上持正面的態度，認為有了資訊及通訊科技，行政工作能事半功倍。」


Background and Framework
Vision Building for IT in Education
Approaches & Strategies for IT Implementation
School Level
Classroom Level

推廣電子學習：思維改變最為重要(許承恩)

【明報專訊】

近期，電子學習成為教育界其中一個重要焦點，不少中、小學提倡「 E-Learning」，鼓勵師生善用資訊科技。

不過，觀乎整體實踐狀況，若然學界欠缺以一套更宏觀、全面的思維方式看待資訊科技，新一波電子學習改革，將有 **可能事倍功半**。

在此想起了一真實事例。話說，某教師很希望能展現一節善用電子學習的課堂，當中平板電腦、網絡配套等器材設備 **成本不菲**。可惜，在課堂中，師生不得已要用 不少時間令全體穩定上網，成功上網後，教師又需用不少時間確認同學們能用指定瀏覽器搜尋資料 。

當課堂能夠正式「開始」時，其中一位同學不禁自言自語：「花了十數分鐘才能上課，而且課堂活動只不過是瀏覽資料，何不一開始就請我們取出袋裏智能手機？這樣豈不更快、更有效率？」

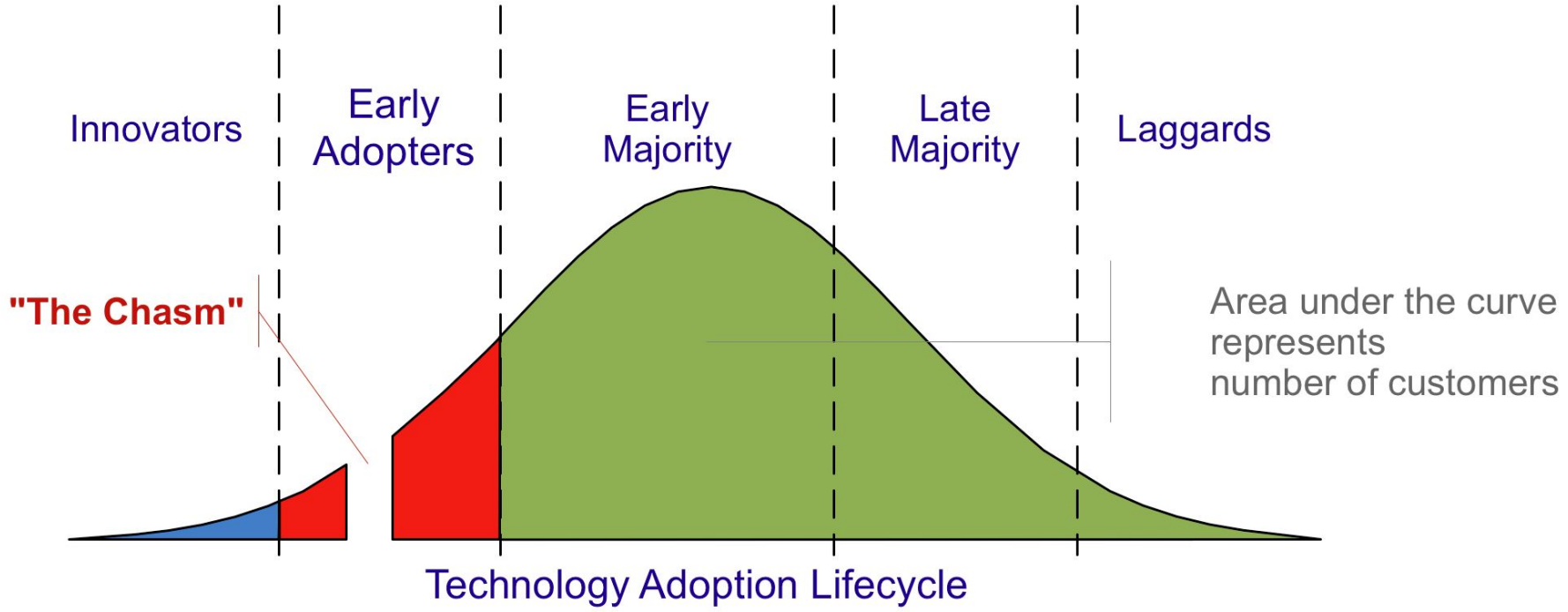
時至今日，學校即使買了多部平板電腦，又買了一定數量電子教科書，仍不足以「可持續」地讓電子學習開展。無可否認，上述方法聊勝於無，但實在 **太「短命」**，只消一兩年，上述昂貴硬件、軟件已成「電子老人院」產品，功能甚至比不上一般大眾所用的電子 產品。

教師面對的困難與挑戰

1. 軟硬件配置未能有效配合

2. 家長、教師及學校對電子學習的發展方向未能同步

3. 電子學習方法未能提高學習興趣及成效


Innovators
Early Adopters
Early Majority
Late Majority
Laggards
"The Chasm"
Area under the curve represents number of customers
Technology Adoption Lifecycle

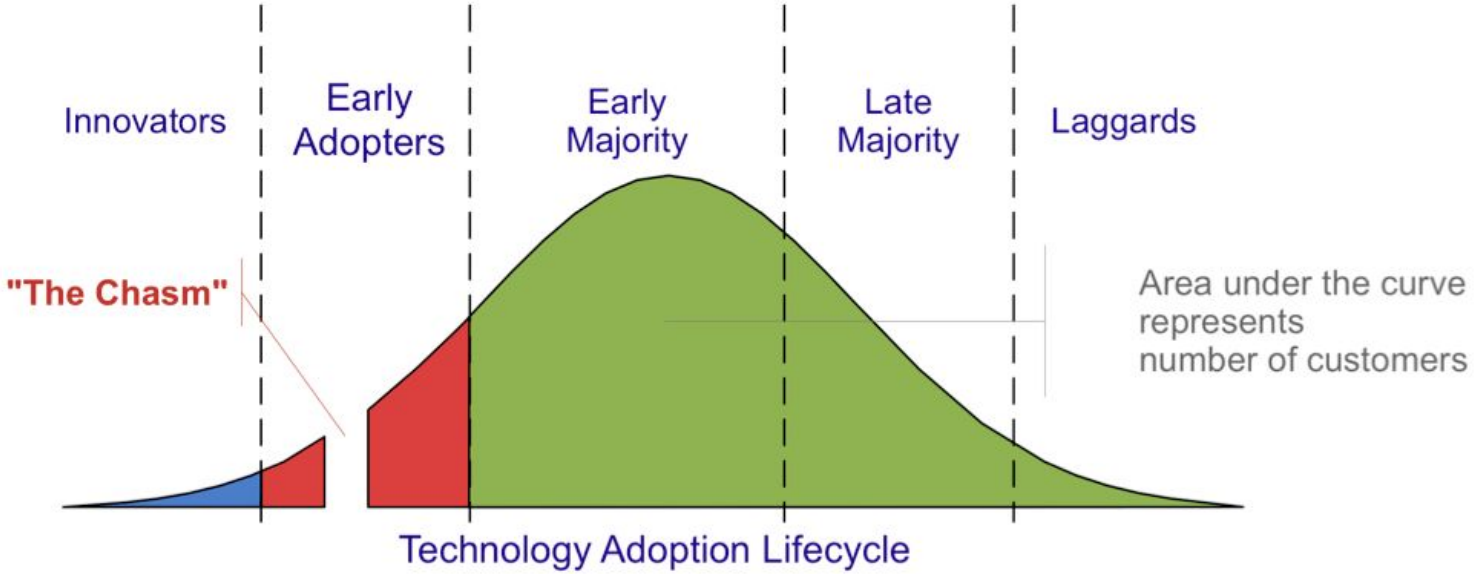
2007
iphone 1
Teenage boy

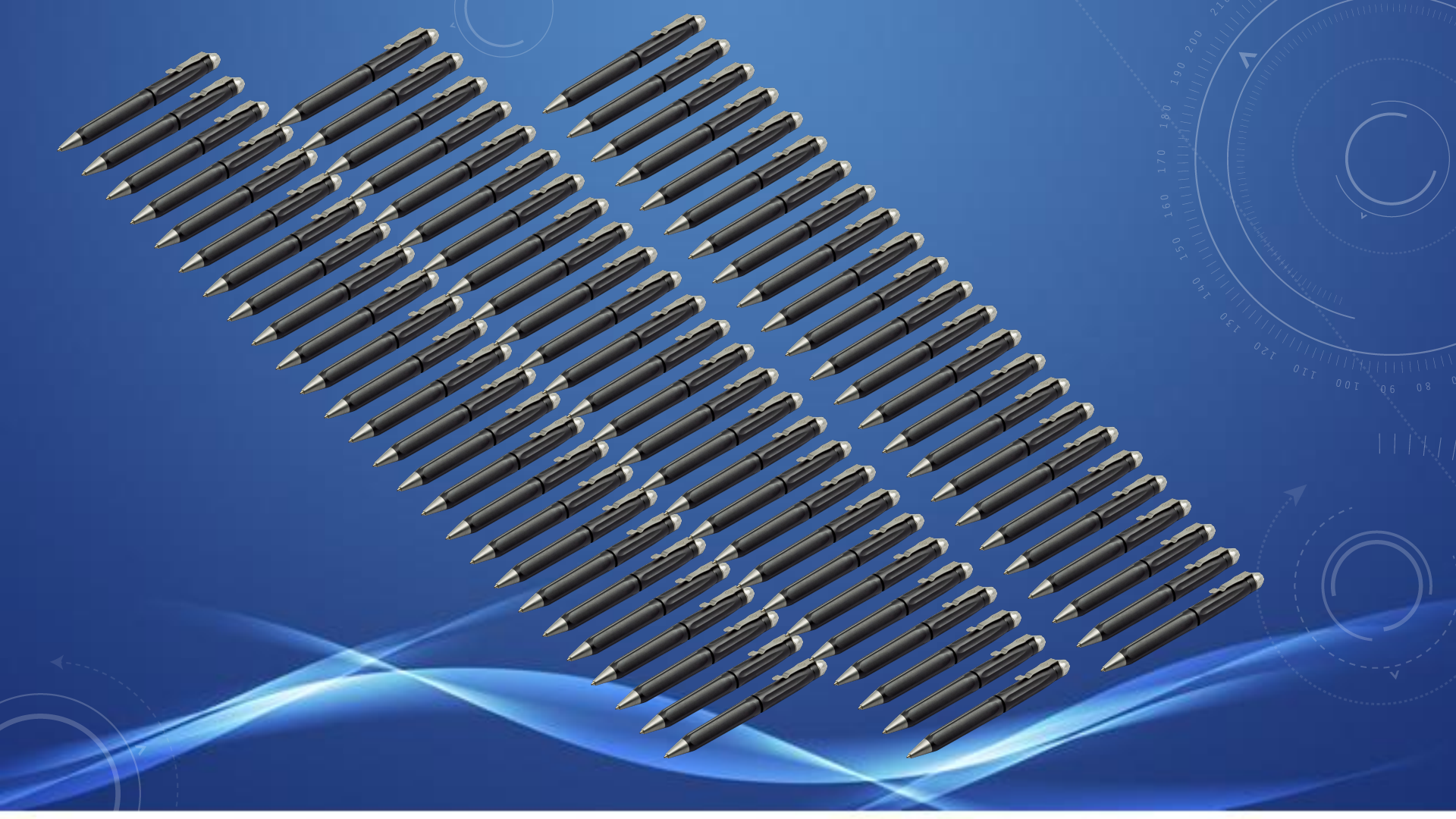
2008
iphone 3G
20yrs Girl

2009
iphone 3GS
Mother

2010
iphone 4
Father

2010
iphone 4S
Grandfather





Technology is nothing. What's important is that you have a faith in people, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them.

Steve Jobs, 1994

Technology is nothing. What's important is that you have a faith in our teachers, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them.

Technology is nothing. What's important is that you have a faith in our teachers, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them.

PAPER
75g/m²
A4
210x297mm
5x500 sheets
LASER
COPIER

教育應用資訊科技的三個重要原則

1. 避免加入不必要的「科技產品」進入課堂
2. 老師能熟練地使用該資訊科技工具
3. 由「小步」開始

帶甚麼進入課堂？

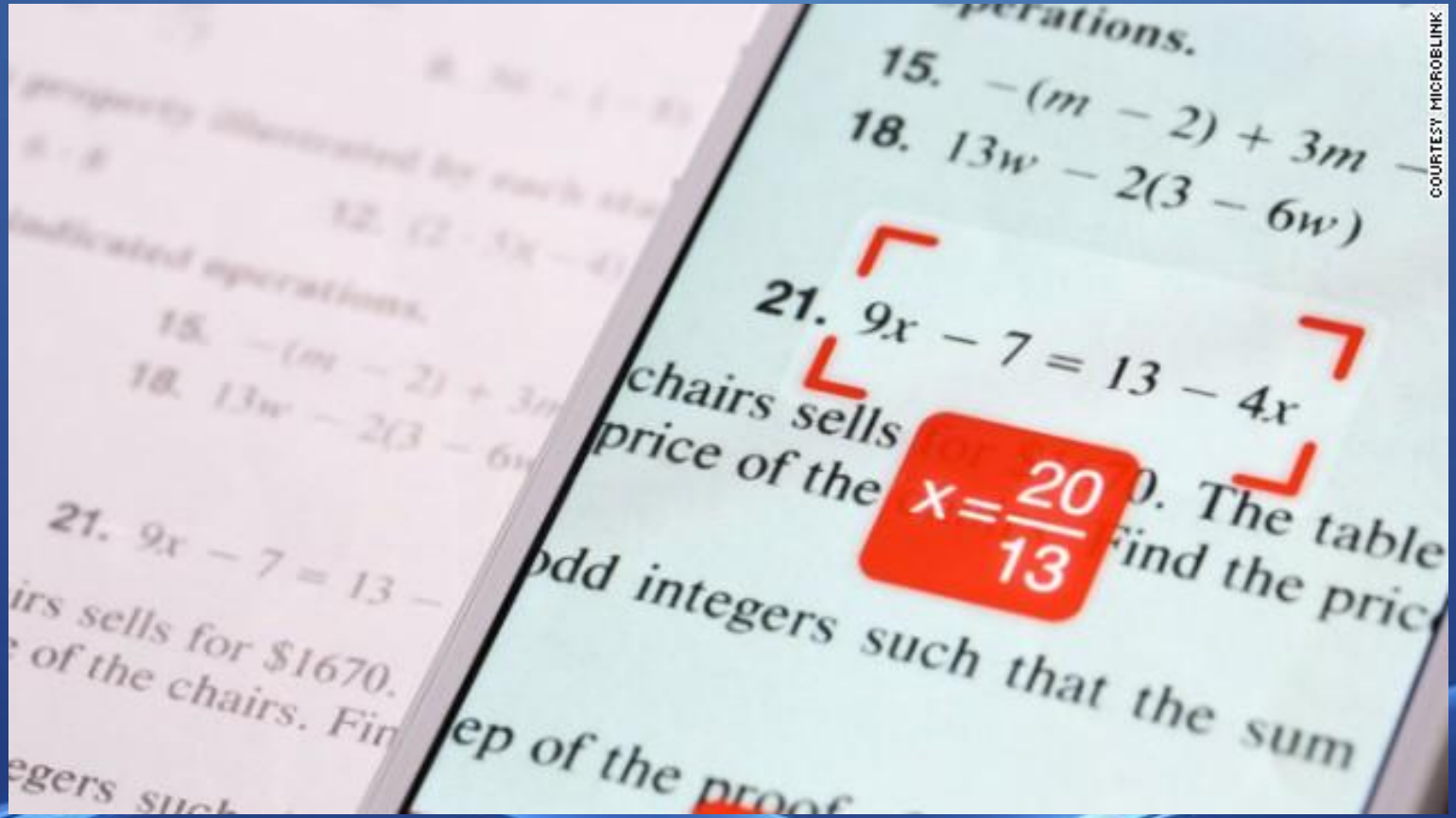
有甚麼科技值得帶入課堂？

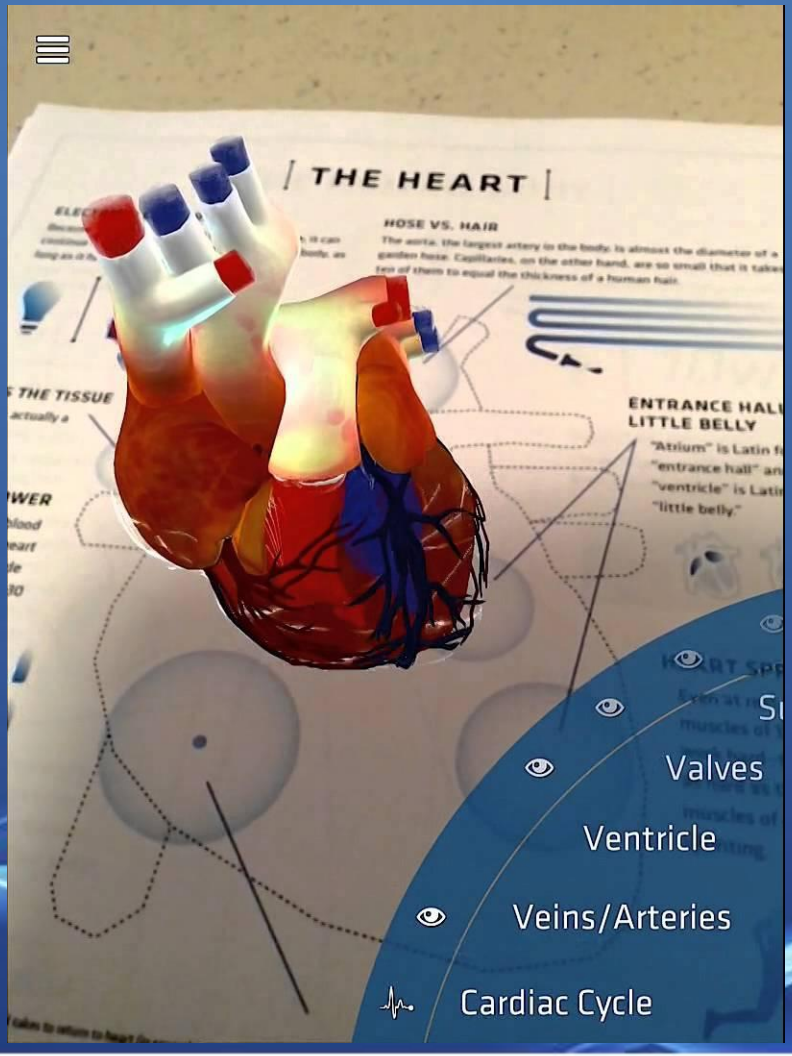
解決甚麼問題呢？

可以優化甚麼呢？
“Let’s make things better”

科技發展怎樣改變學生的學習？

看看以下的例子……


perations.
15. $-(m-2)+3m$
18. $13w-2(3-6w)$
21. $9x-7=13-4x$
$x=\frac{20}{13}$
chairs sells
price of the
0. The table
ind the pric
odd integers such that the sum
ep of the proof
irs sells for $1670.
of the chairs. Fir
egers such
COURTESY MICROBLINK


THE HEART
HOSE VS. HAIR
THE TISSUE
ENTRANCE HALL
LITTLE BELLY
Valves
Ventricle
Veins/Arteries
Cardiac Cycle

硬件及軟件的配合

電子教學上的硬件及軟件

硬件:

無線網絡WiFi

平板電腦

投影機

無線投影裝置

軟件:

流動應用程式 Apps

教學管理平台 LMS

課堂即時回饋應用

雲端平台

電子教學上的硬件及軟件

硬件:

無線網絡WiFi

平板電腦

投影機

無線投影裝置

軟件:

流動應用程式 Apps

教學管理平台 LMS

課堂即時回饋應用

雲端平台

Find a Partner

Provide great learning experiences with free email, websites, online document editing and storage, IM, video conferencing and social networking!

OneNote Class Notebooks for IT Admins

Get your OneNote Class Notebook and OneNote Staff Notebook IT deployment questions

Next Steps

Begin: Start your free trial today! Sign up for a 90-day trial that converts to a production environment when ready.

Assemble: Get ready to deploy. Review Deployment options that fit for your school.

Unleash: Learn how to use. From basic how to information, to curriculum integration, to professional certification to help get you started!

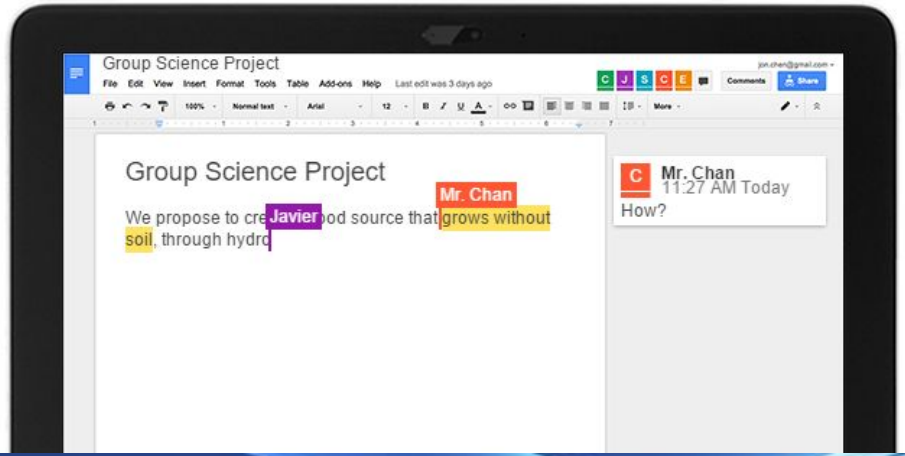
Google for Education

Talk to an Expert | Get Google Products

Home | Products | Training | Resources | Higher Ed | IT Guide

Save time and stay connected

Google Apps for Education:
A Suite of Free Productivity Tools for Classroom Collaboration



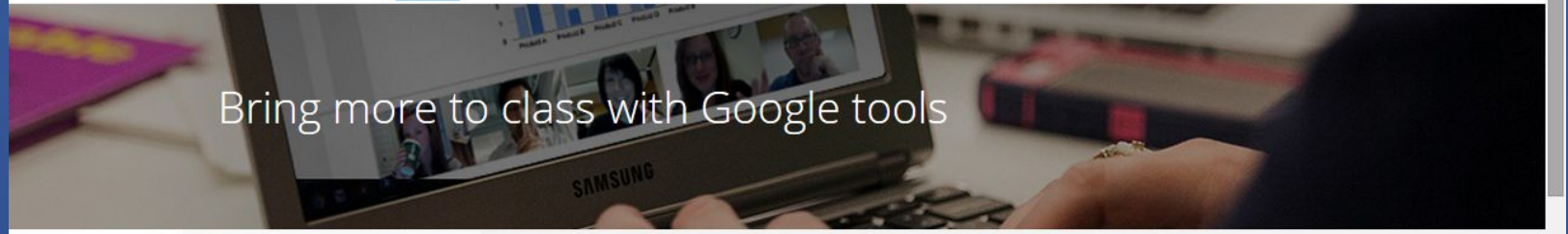
Google Apps for Education

Google Apps for Education認證

Google for Education

Get Help | Get Google Products

Home | Products | Training | Resources | IT Guide | Higher Ed



Lessons

- Android Tablets for Education
- Calendar
- Chrome
- Chromebooks
- Classroom
- Digital Citizenship
- Docs Suite
- Docs
- Drawings
- Drive
- Forms
- Gmail
- Google Maps
- Google Play for Education
- Implementing Google Apps
- Search
- Sheets
- Sites
- Slides
- YouTube

Certifications

Google in your classroom

Google has a range of tools for teaching and learning. This collection of lessons introduces what they are and how to apply them. If you are interested in completing a Basics Exam, becoming a Google Educator or applying to be a Google Education Trainer, click here.

To view this content and obtain the Basics certificate in other languages, visit this site.

Classroom

Save time, keep classes organized, and improve communication with students.

> Introduction

> Basics

Docs Suite

Store everything, create and share anything.

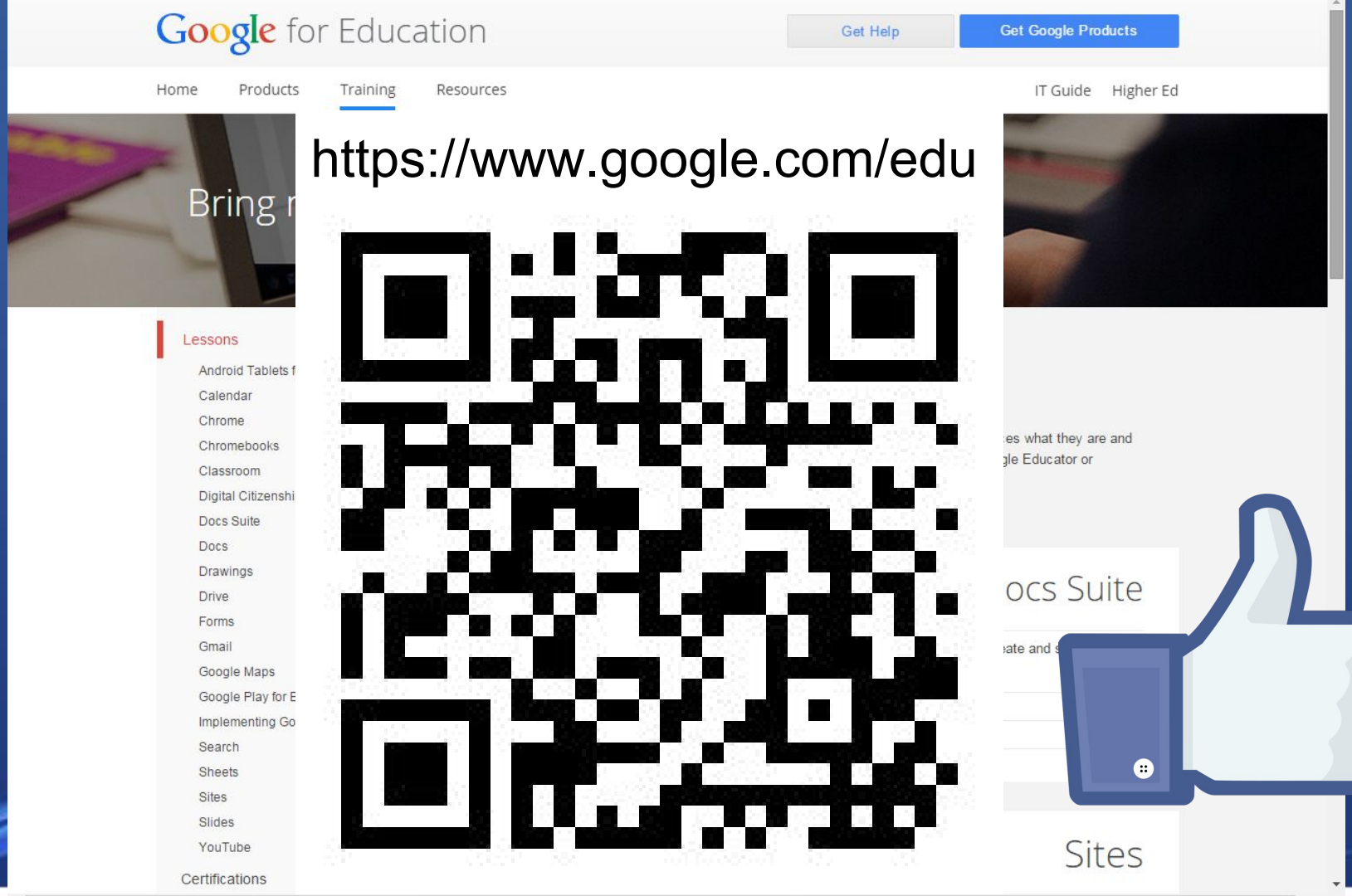
> Introduction

> Basics

> Advanced

Gmail

Sites


Google for Education
Get Help
Get Google Products
Home
Products
Training
Resources
IT Guide
Higher Ed
https://www.google.com/edu
Lessons
Android Tablets f
Calendar
Chrome
Chromebooks
Classroom
Digital Citizenshi
Docs Suite
Docs
Drawings
Drive
Forms
Gmail
Google Maps
Google Play for E
Implementing Go
Search
Sheets
Sites
Slides
YouTube
Certifications
es what they are and
gle Educator or
ocs Suite
Sites

Home & Office

Gmail
Fast, searchable email with less spam

Docs
Open, edit, and create documents

Slides
Open, edit, and create presentations

Drawings
Create diagrams and flow charts

Calendar
Organize your schedule and share events with friends

Google Cloud Print
Print anywhere, from any device

Drive
Create, share and keep all your stuff in one place

Sheets
Open, edit, and create spreadsheets

Forms
Build free surveys

Sites
Create websites and secure group wikis

Translate
Instantly translate text, web pages, and files between over 50 languages

Google Keep
Save what's on your mind

Social

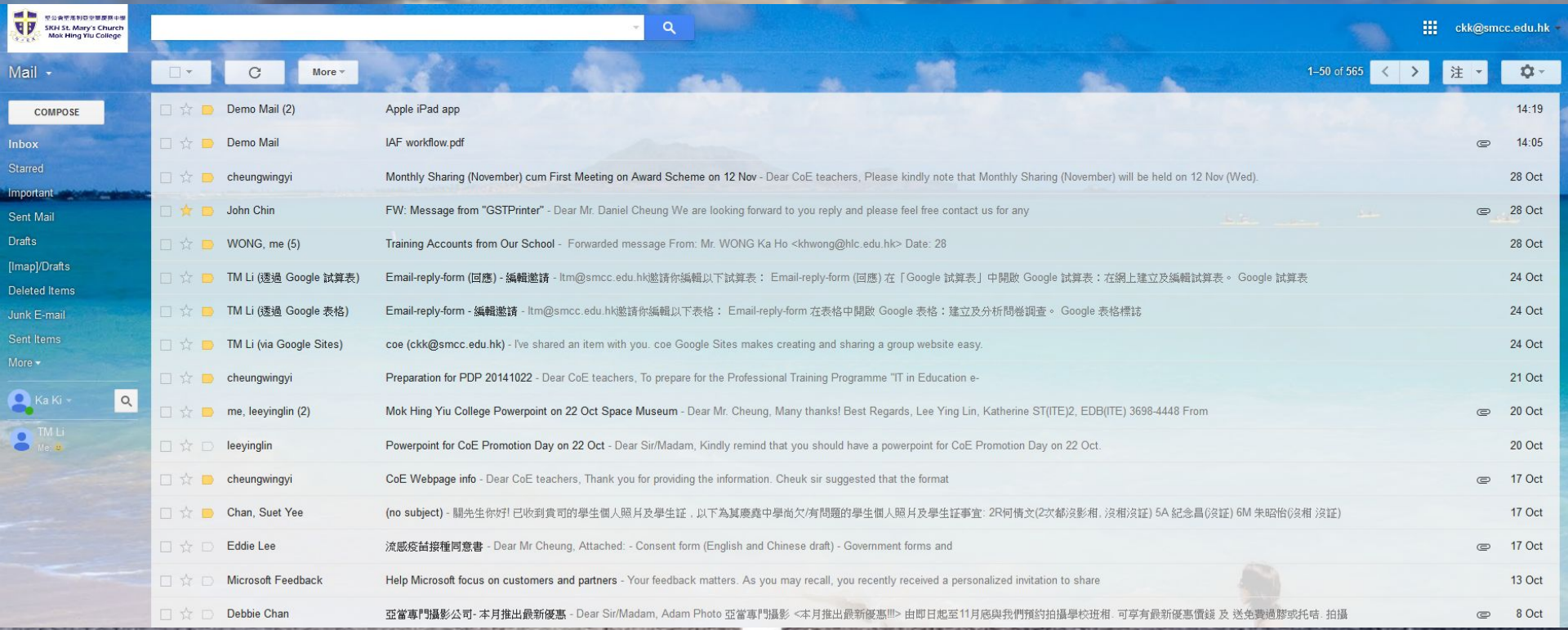
Google+
Real-life sharing, rethought for the web

Groups
Create mailing lists and discussion groups

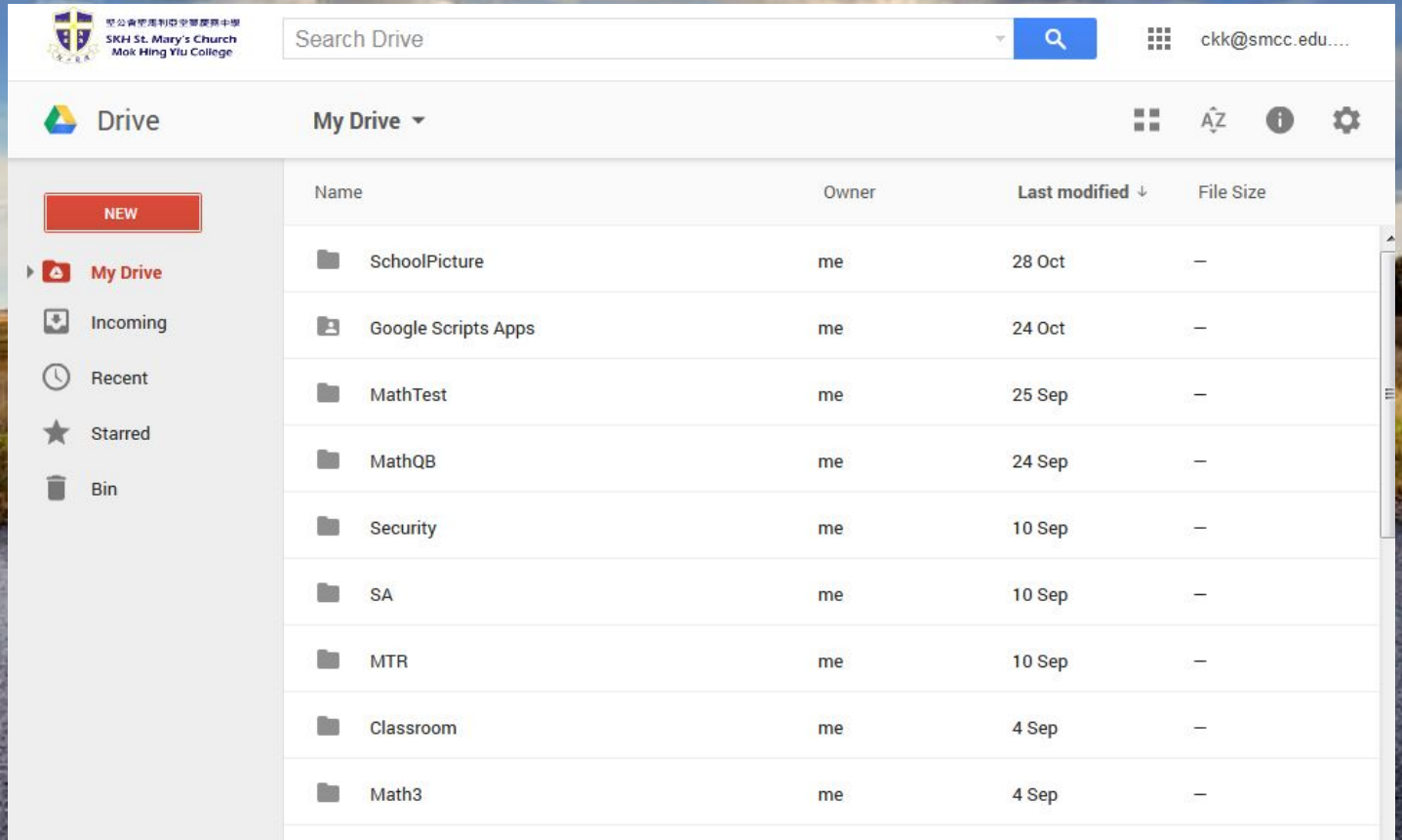
Blogger
Share your life online with a blog - it's quick, easy and free

Hangouts
Conversations that come to life. Anytime, anywhere, for free

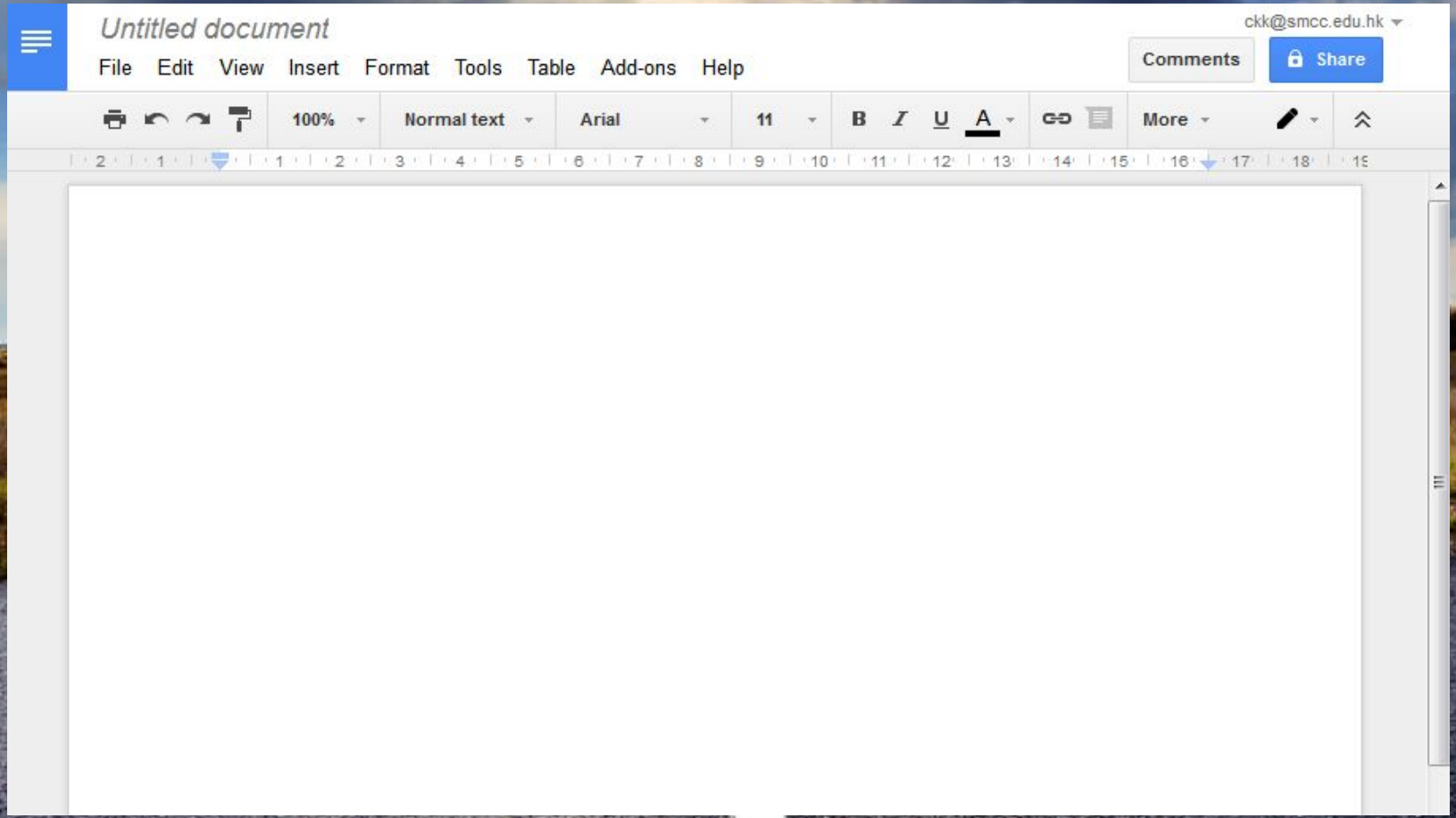
Gmail


SKH St. Mary's Church Mok Hing Yiu College
ckk@smcc.edu.hk
Mail
More
1–50 of 565
COMPOSE
Inbox
Starred
Important
Sent Mail
Drafts
[Imap]/Drafts
Deleted Items
Junk E-mail
Sent Items
More
Ka Ki
TM Li
Demo Mail (2) Apple iPad app 14:19
Demo Mail IAF workflow.pdf 14:05
cheungwingyi Monthly Sharing (November) cum First Meeting on Award Scheme on 12 Nov - Dear CoE teachers, Please kindly note that Monthly Sharing (November) will be held on 12 Nov (Wed). 28 Oct
John Chin FW: Message from "GSTPrinter" - Dear Mr. Daniel Cheung We are looking forward to you reply and please feel free contact us for any 28 Oct
WONG, me (5) Training Accounts from Our School - Forwarded message From: Mr. WONG Ka Ho <khwong@hlc.edu.hk> Date: 28 28 Oct
TM Li (透過 Google 試算表) Email-reply-form (回應) - 編輯邀請 - ltm@smcc.edu.hk邀請你編輯以下試算表： Email-reply-form (回應) 在「Google 試算表」中開啟 Google 試算表：在網上建立及編輯試算表。 Google 試算表 24 Oct
TM Li (透過 Google 表格) Email-reply-form - 編輯邀請 - ltm@smcc.edu.hk邀請你編輯以下表格： Email-reply-form 在表格中開啟 Google 表格：建立及分析問卷調查。 Google 表格標誌 24 Oct
TM Li (via Google Sites) coe (ckk@smcc.edu.hk) - I've shared an item with you. coe Google Sites makes creating and sharing a group website easy. 24 Oct
cheungwingyi Preparation for PDP 20141022 - Dear CoE teachers, To prepare for the Professional Training Programme "IT in Education e- 21 Oct
me, leeyinglin (2) Mok Hing Yiu College Powerpoint on 22 Oct Space Museum - Dear Mr. Cheung, Many thanks! Best Regards, Lee Ying Lin, Katherine ST(ITE)2, EDB(ITE) 3698-4448 From 20 Oct
leeyinglin Powerpoint for CoE Promotion Day on 22 Oct - Dear Sir/Madam, Kindly remind that you should have a powerpoint for CoE Promotion Day on 22 Oct. 20 Oct
cheungwingyi CoE Webpage info - Dear CoE teachers, Thank you for providing the information. Cheuk sir suggested that the format 17 Oct
Chan, Suet Yee (no subject) - 關先生你好! 已收到貴司的學生個人照片及學生証，以下為葵慶堯中學尚欠/有問題的學生個人照片及學生証事宜: 2R何倩文(2次都沒影相, 沒相沒証) 5A 紀念昌(沒証) 6M 朱昭怡(沒相 沒証) 17 Oct
Eddie Lee 流感疫苗接種同意書 - Dear Mr Cheung, Attached: - Consent form (English and Chinese draft) - Government forms and 17 Oct
Microsoft Feedback Help Microsoft focus on customers and partners - Your feedback matters. As you may recall, you recently received a personalized invitation to share 13 Oct
Debbie Chan 亞當專門攝影公司- 本月推出最新優惠 - Dear Sir/Madam, Adam Photo 亞當專門攝影 <本月推出最新優惠!!!> 由即日起至11月底與我們預約拍攝學校班相. 可享有最新優惠價錢 及 送免費過膠或托咭. 拍攝 8 Oct

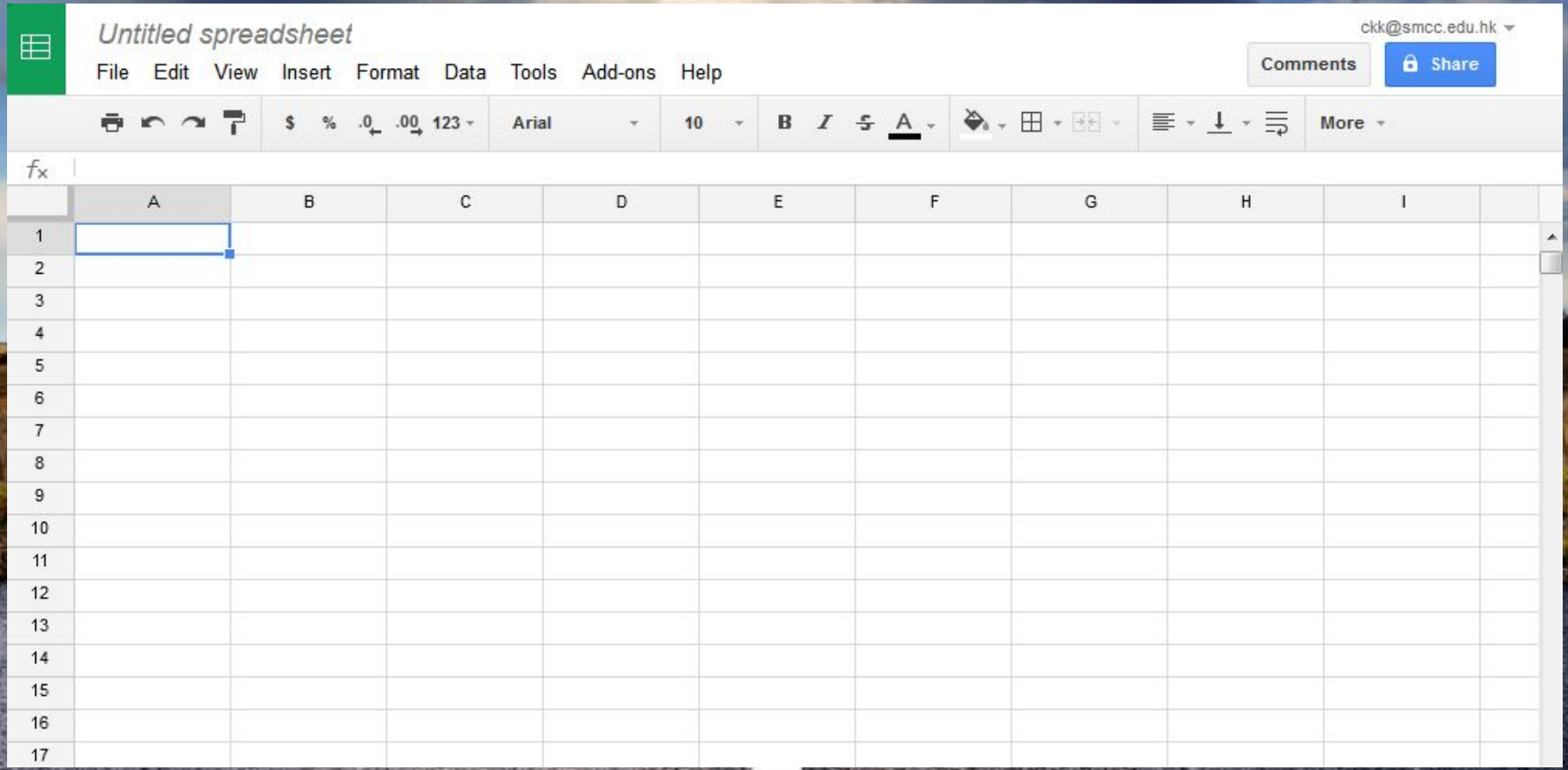
Google Drive 雲端硬碟



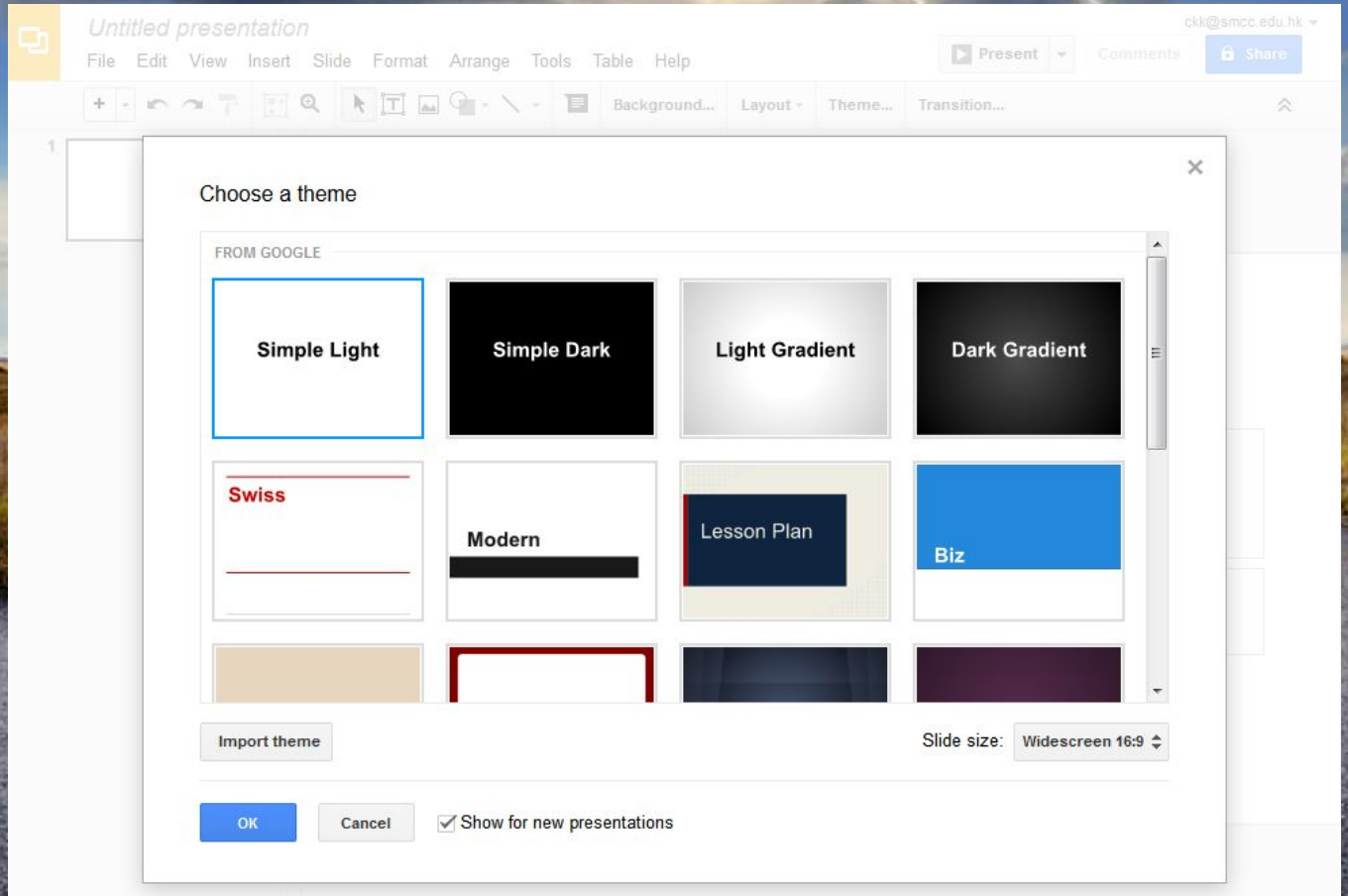
建立文件、試算表、簡報和表單



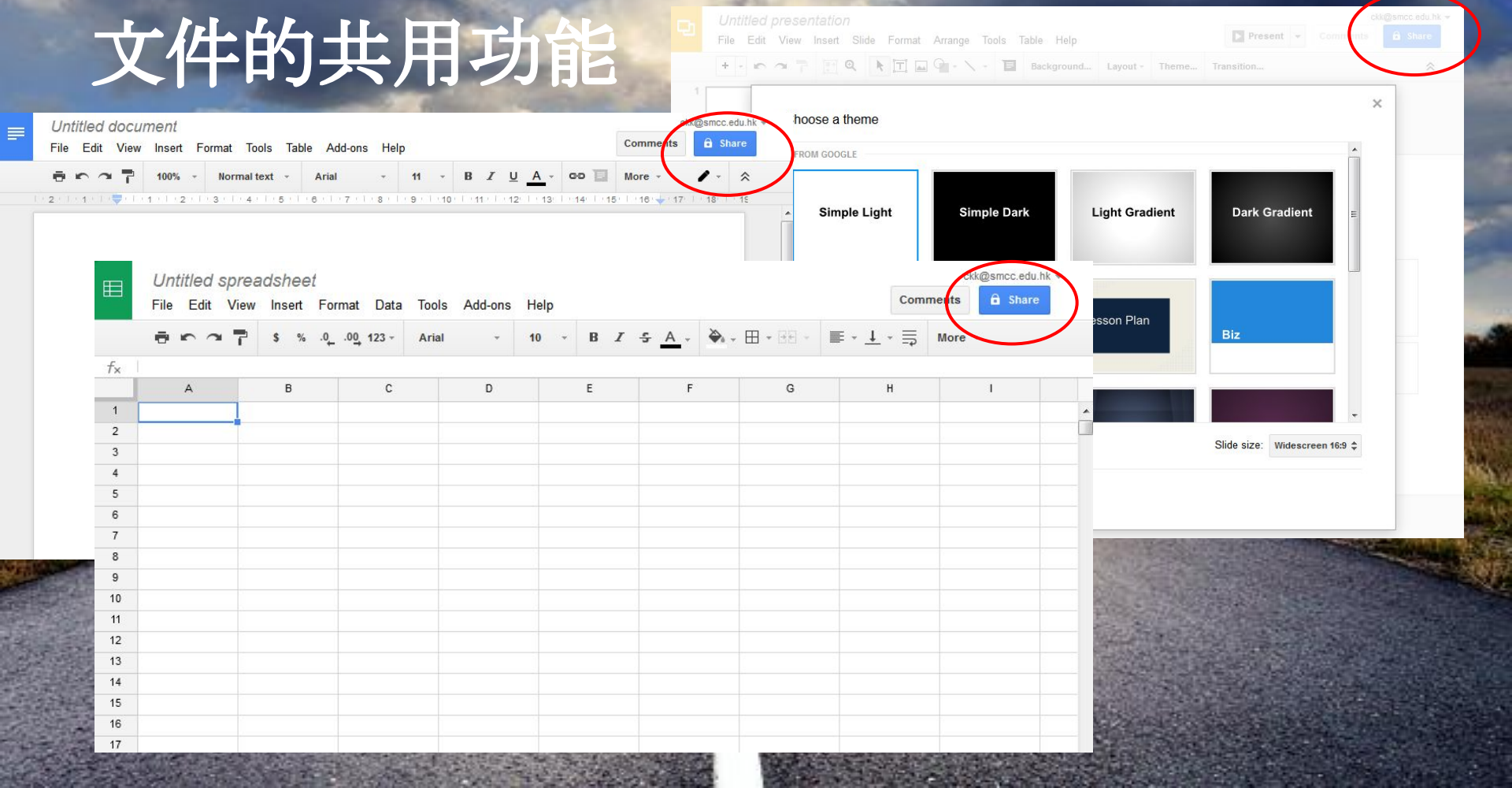
建立文件、試算表、簡報和表單



建立文件、試算表、簡報和表單



文件的共用功能


Untitled presentation
File Edit View Insert Slide Format Arrange Tools Table Help
Present
Share
Background...
Layout
Theme...
Transition...
hoose a theme
FROM GOOGLE
Simple Light
Simple Dark
Light Gradient
Dark Gradient
Biz
Slide size:
Widescreen 16:9
Untitled document
File Edit View Insert Format Tools Table Add-ons Help
Comments
Share
100%
Normal text
Arial
11
More
Untitled spreadsheet
File Edit View Insert Format Data Tools Add-ons Help
Comments
Share
Arial
10
More
A B C D E F G H I
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Google Sites

個人成長小組匯報 Updated Mar 25, 2014, 6:43 PM

Share

聖公會聖馬利亞堂莫慶中學
SKH St. Mary's Church Mok Hing Yiu College

中四級通識教育科13-14年度

搜尋這個協作平台

- 首頁
- 2014通識文憑試
- 個人成長
  - 個人成長小組匯報
  - 影視資源
- 社會政治參與報章評論
  - 余詩敏
  - 劉健鋒
  - 夏嘉欣
  - 孔令峰
  - 易明偉
  - 曾裕恩
  - 李添樂
  - 林嘉惠
  - 林永浩
  - 林鈺樺
  - 甘果
  - 甘碧瑩
  - 甘碧瑩
  - 翁偉詩
  - 范詠心
  - 蔡加賢
  - 譚綺玲
  - 陳家豪
  - 陳曉靜

個人成長 >

個人成長小組匯報

開啟文件

利用Apps與雲端，教導學生解讀通識漫畫題

學生已有知識：

青少年成長中可能遇上的挑戰

分析及比較數據的能力

教學目標：

學生能夠 -

辨識議題內與個人成長相關的價值觀，解釋議題背後的現象

辨識漫畫資料的價值觀，利用資料解釋價值觀

評估建議的成效

學生能力轉移

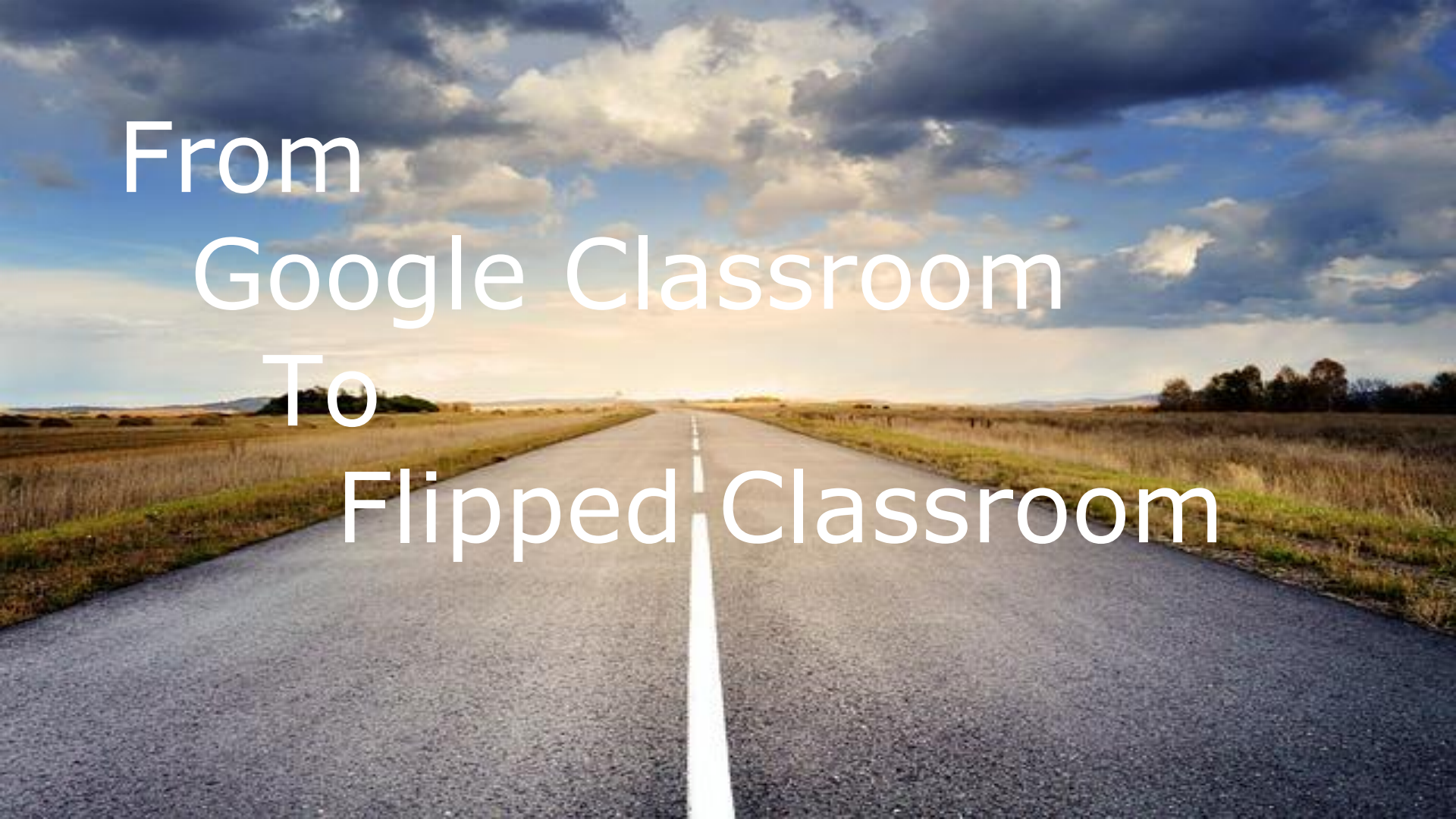
議題	相關知識及概念	通識能力
1. TRAINING TASK：整容 2. 探究題目：對整容的接受程度如何反映青少年的價值觀？	自尊 自我概念 價值觀 權利與責任 生活技能	➢ 比較數據的能力 ➢ 利用資料描述/解釋現象的能力 ➢ 利用資料指出及解釋價值觀的能力 ➢ 方法建議的成效評估(高階思維)
2.TRANSFER TASK： 由老師提供若干議題或由學生自擬，自行搜證並展示相應的知識、概念及通識能力 ● 過度消費 ● 追星 ● 網上交友		

減少技術障礙，提升教學成效

Classroom 開放所有 Google Apps for Education 使用者使用；除了 Classroom 之外，Google Apps for Education 這套免費的生產力工具還提供 Gmail、Google 雲端硬碟和 Google 文件等服務。

Classroom 可讓老師直接在線上建立及收回作業，完全不浪費紙張，而且提供多項省時省力的功能，比方自動為每位學生建立 Google 文件副本。此外，Classroom 也會自動為每位學生建立各項作業專屬的雲端硬碟資料夾，讓每個人的資料都井井有序。

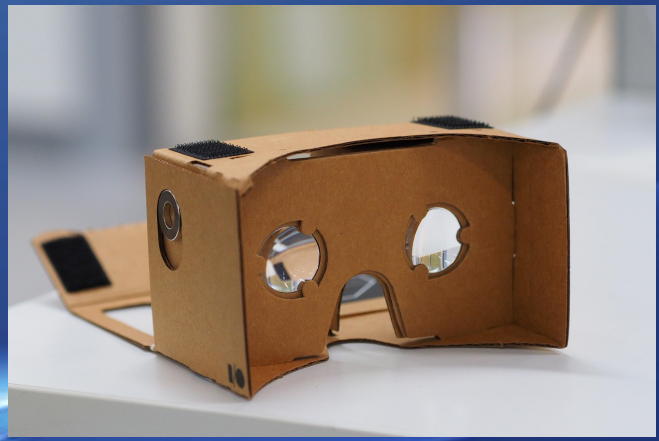
學生可隨時在「作業」頁面查看各項作業的繳交期限，只要點選作業就能開始動


From
Google Classroom
To
Flipped Classroom

校本自行開發套件

GOOGLE VR CARDBOARD 與環視圖庫

1 提高學習興趣
2 外國街景的「實地考察」
3 分享實景考察的記錄
4 分類搜尋材料庫
5 提供通識, 旅遊, 視藝或語文等科目的視覺材料
6 虛擬世界 : Cubic maps!



雲端白板的設計意念:

1 老師可以在課室內移動, 無須在實體白板上書寫
2 拍攝教材或學生書寫內容, 無須使用實物投影機
3 學生參與:繪畫或拍攝
4 在線資料:學生使用狀況, 配合流動學習
5 擷取教材:學生隨時接取雲端白板內容, 作後續工作之用

學校該購買哪一機種？

- 推展科目？
- 戶外考察？
- App質素？
- 即時回饋？
- 鏡像投射？
- 器材管理？
- BYOD?價錢?保養?
- 雲端支援？

學校該購買哪一機種？

Name	Apple iPad	Android Tablet	Windows Tablet	Chromebook
OS	iOS	Android	Windows 10	ChromeOS
Model	iPad/ iPad mini 4/ Wifi	Samsung Note/ Asus/Nexus	Microsoft Surface/Lenovo/Dell/Onda	HP/Samsung/ Acer
Price	$3088 - $4888	$400 - $4500	$1800 - $8000	$1600
Screen Size	7.9 - 9.7 inches	7 - 10.1 inches	8 - 12 inches	11 - 13 inches
Screen Projection	Stable	Depends	Stable	Depends
Apps	App store	Play Store	Marketplace	ChromeApp

Bring Your Own Device
B.Y.O.D.的考慮

保安及用戶登入限制

平衡學生私隱及裝置管理

教學軟件及電子書的角色

現有學校網絡與新建無線網絡的整合

內聯網伺服器設置

課室鏡像投射

資訊素養教育的配套

無線網絡的覆蓋範圍

現有校規對電子器材的規管

家長的考慮

如何有效使用？

多謝各位