

### 3. Adapting CPS Mobile Apps/Platforms under Wi-Fi Supported Network Environment and Cloud-based Technology to Enhance Collaborative Learning

#### Teachers' perspective (教學設計): 課程規劃

- The phrase “curriculum planning” can mean one of two related things:
  - Micro Level: either the process of an individual teacher to build a class curriculum, or
  - Macro Level: the means through which school boards coordinate the various curricula being used by teachers in order to achieve uniform goals.



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#### Teachers' perspective (教學設計): 課程規劃

- *Curriculum* is basically a lesson plan that functions as a **map for learning**.
- Careful planning is required to ensure first that the lessons actually touch on all required topics, and also that they meet school or governmental standards of basic education.



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#### Teachers' perspective (教學設計): 課程規劃

- Curriculum planning develop well-coordinated, quality **teaching, learning** and **assessment** programs
- which build students' **knowledge, skills** and **behaviors** in the disciplines, as well as their interdisciplinary and/or physical, personal and social capacities.
- The full range of learning needs of students are addressed



### 3. Adapting CPS Mobile Apps/Platforms under Wi-Fi Supported Network Environment and Cloud-based Technology to Enhance Collaborative Learning

Students' perspective 學生層面: (資訊素養)

#### eLearning Strategies : Student

• Information Literacy (IL)香港學生資訊素養 2016

類別	八個素養範疇	
有效及符合道德地運用資訊，以達致終身學習	1	符合道德地及負責任地使用、提供和互通資訊
一般的資訊素養能力	2	識別和定義對資訊的需求
	3	找出和獲取相關資訊
	4	評估資訊和資訊提供者的權威、公信力及可靠性
	5	提取和整理資訊以及產生新意念
資訊世界	6	能夠運用資訊科技處理資訊和建立內容
	7	認識社會上資訊提供者（例如圖書館、博物館、互聯網）的角色和功能
	8	認識能獲取可靠資訊的條件



## **4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning**



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Real-time whiteboard how to use them in lesson:

- Realtimeboard (free for groups of 3 people)
- Padlet
- Whiteboard (iOS)

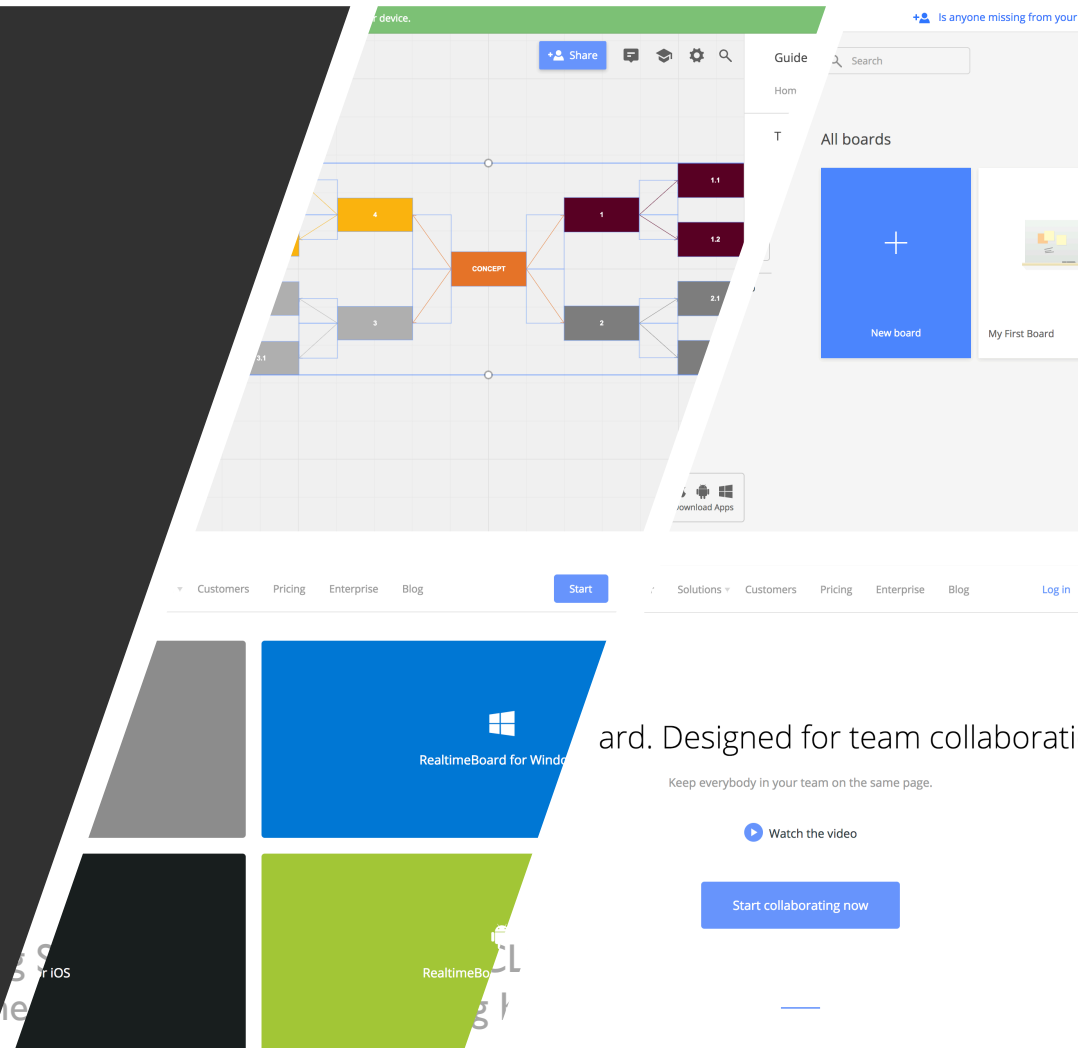


## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Realtimeboard: <https://realtimeboard.com/>

Real-time whiteboard  
how to use them in  
lesson:

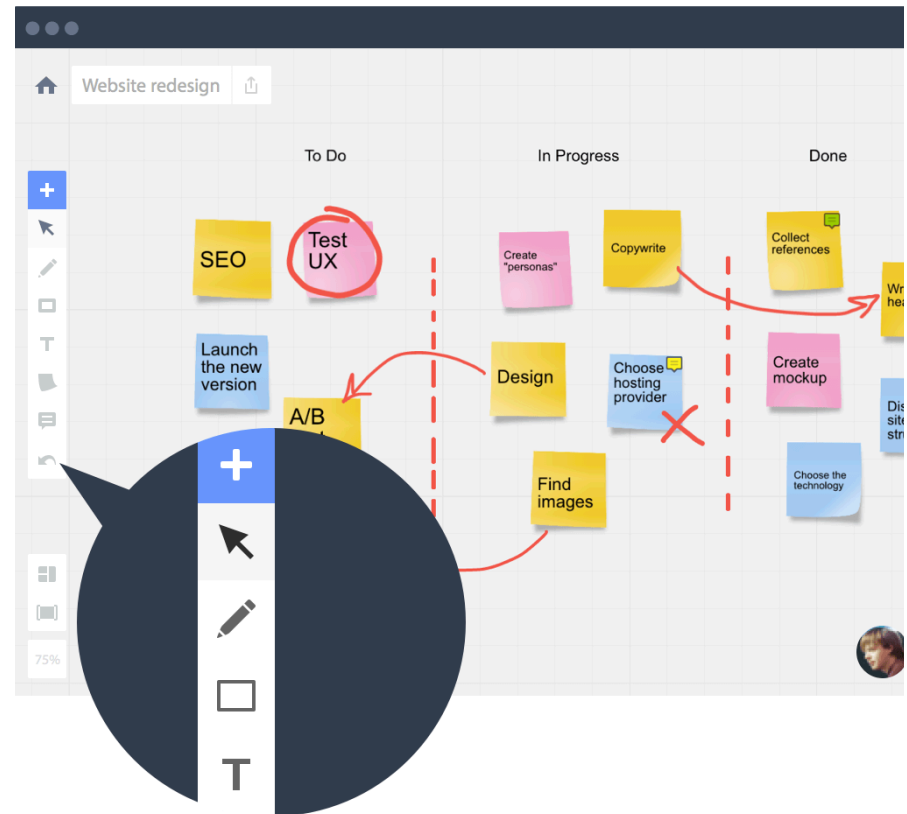
Realtimeboard  
(free for groups of 3  
people)



# Whiteboard toolkit

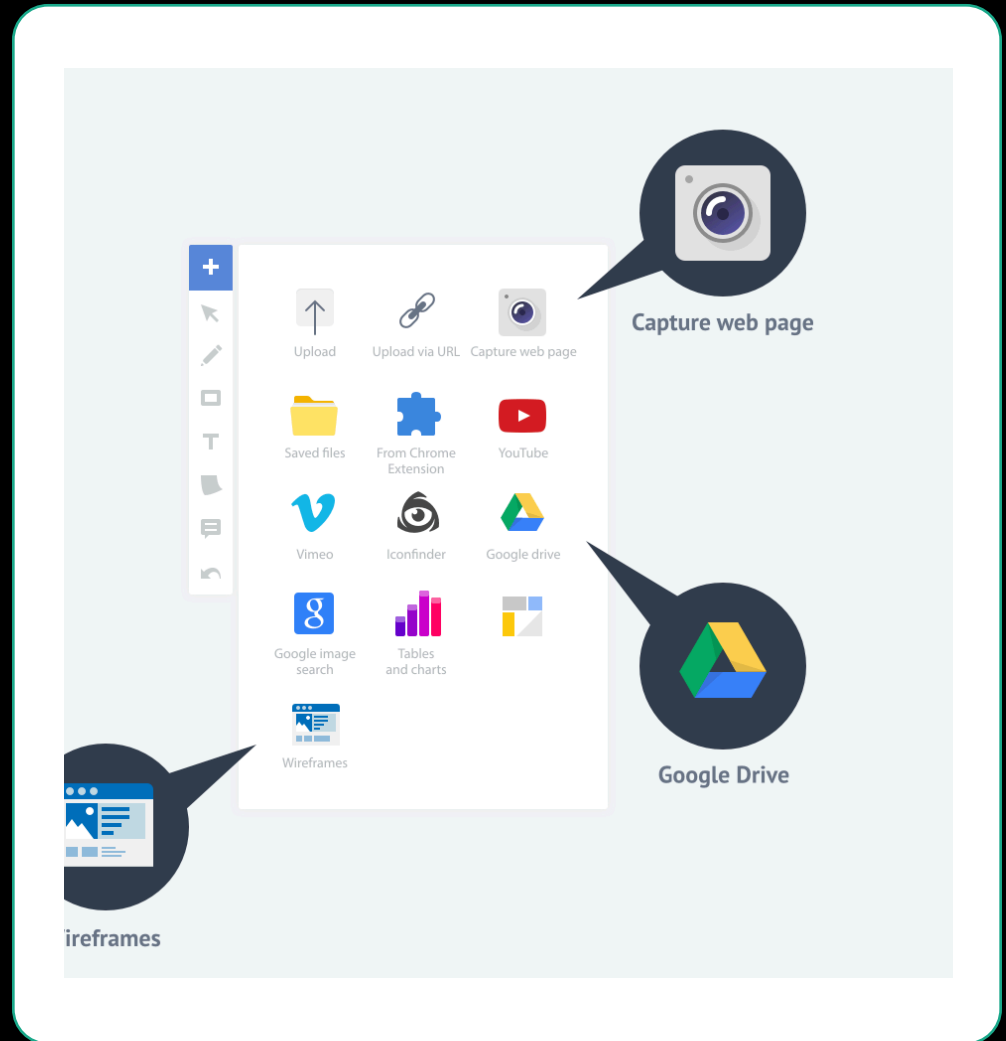
Use the intuitive whiteboard toolkit to create mockups and schemes, write down ideas and leave feedback on your colleagues' input.

Also **Post-it notes**. Lots of them!



# Ready to be used

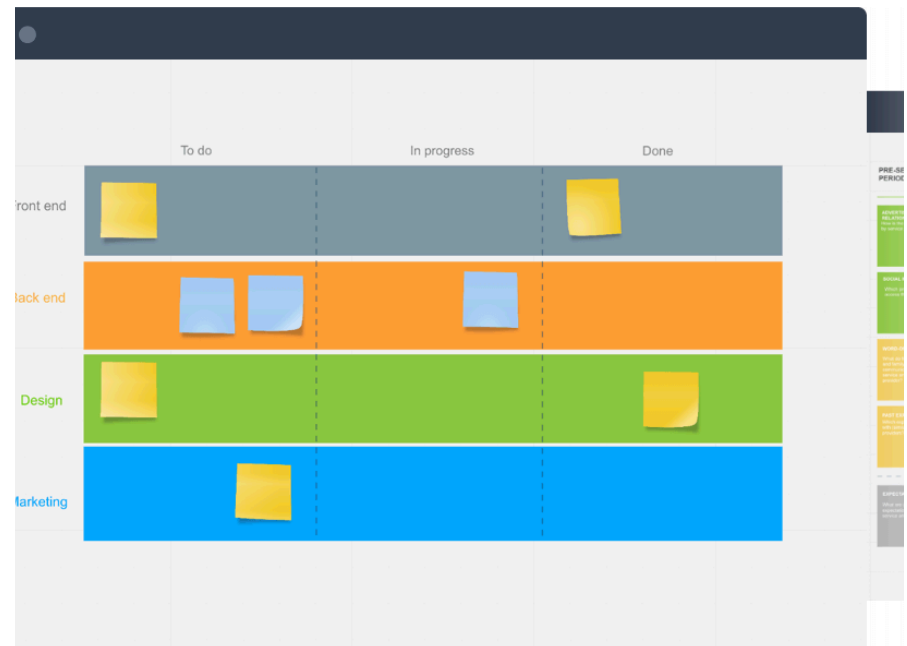
Add files, images and documents from your computer and Google Drive, or explore the built-in collections and integrated libraries of icons, wireframes and other content ready to be used on your boards.



# Pre-loaded with templates

Think it's a cool concept, but don't know where to start?

Pick a couple of our hand-crafted **templates** to fire up your project and get a head start on any task.



Agile board

# Powerful collaboration features

- Get more work done by **sharing** the board with colleagues, clients or friends.
- **Collaborate in real-time** and see all the changes instantly, or work across continents and time zones while still staying on the same page.

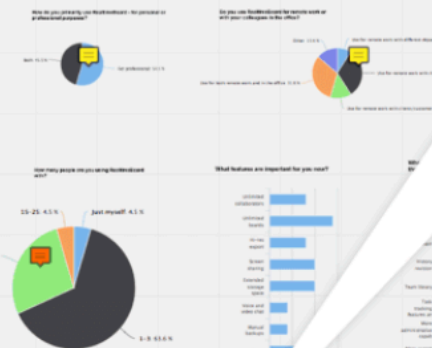


Andrew  
Looks like we need some tracking features



Jessica  
What about that Trello

## Collaboration



## WORKFLOW

I add things for people to review to present ideas: Concepts, conversations, refining, videos,

In my experience, I create content and I shared with team mate, my team mate didn't edit.

I share some and keep others private, we don't collaborate too much on them unless we are in a meeting together

They contribute to the list of product features

Everyone add their part and share information remotely

We are still figuring it out. My business partner and I have made "doodle" boards which then became collaborative boards. We find the sharing and inviting a bit clunky, but that may be because we haven't experimented with it a lot. We expect to be using Real Time Boards in spurts, mostly for new project development.



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Padlet : <https://padlet.com/>

padlet

Why Padlet

学府使用

商业使用

帮助

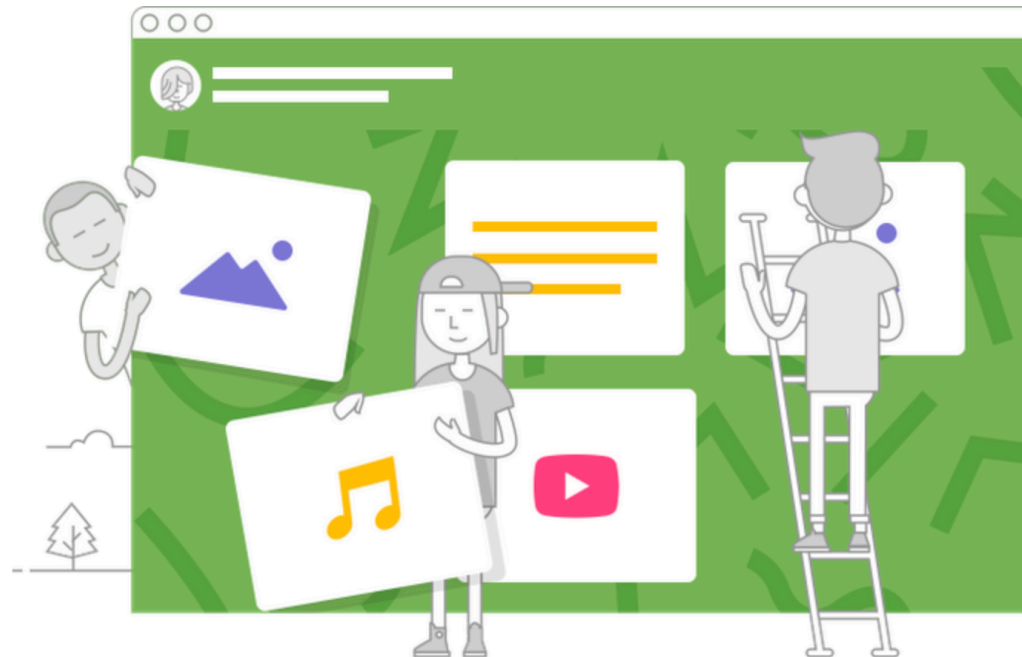
登录

# Collaborate better. Be more productive.

Make beautiful boards, documents, and webpages that are easy to read and fun to contribute to.

注册

Already using Padlet? [登录](#).



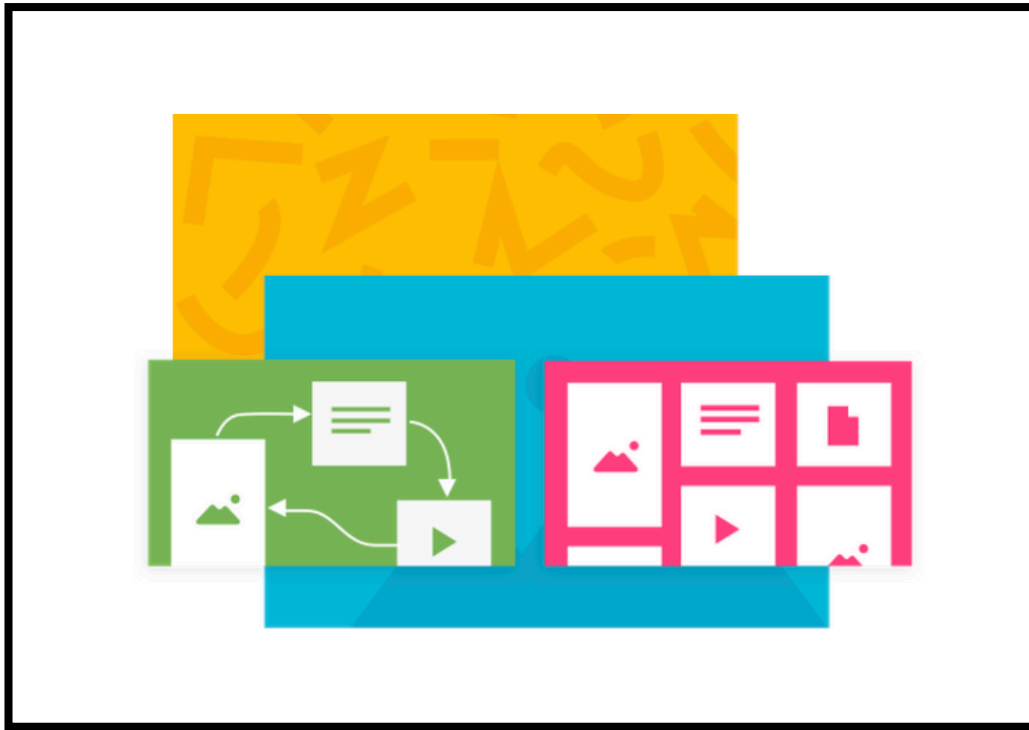
Centre for Learning Sciences and Technologies (CLST)  
The Chinese University of Hong Kong





## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Padlet : <https://padlet.com/>

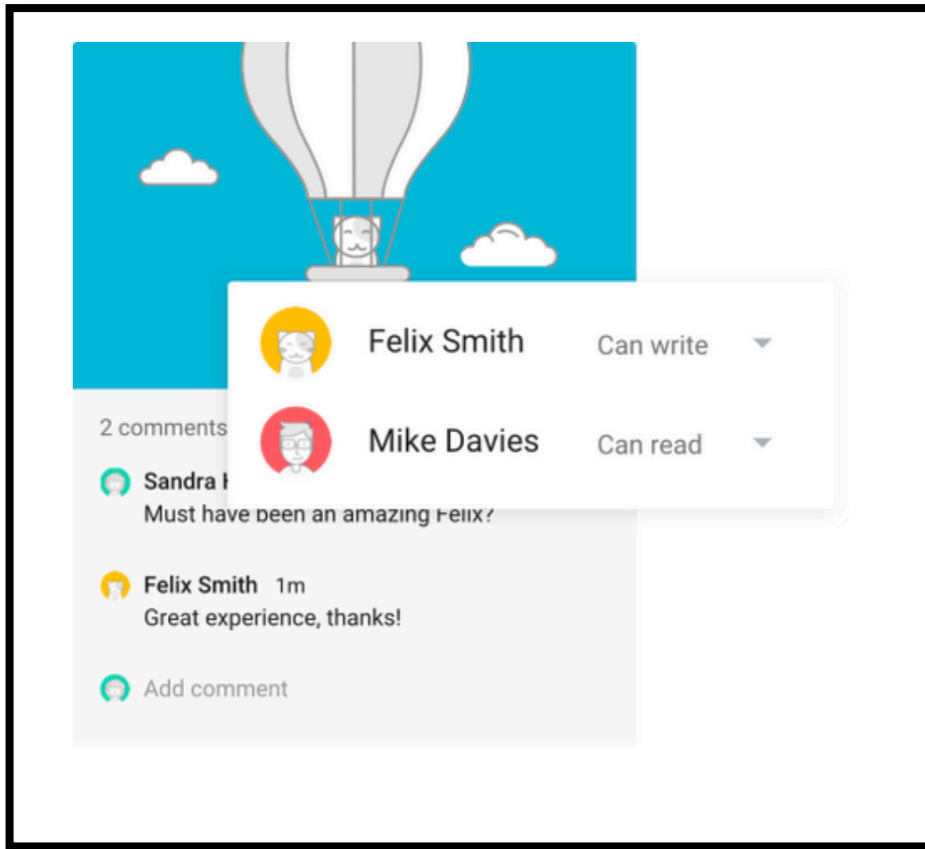


### 1. Style

Choose a premade **template** or go bold with a blank slate

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Padlet : <https://padlet.com/>

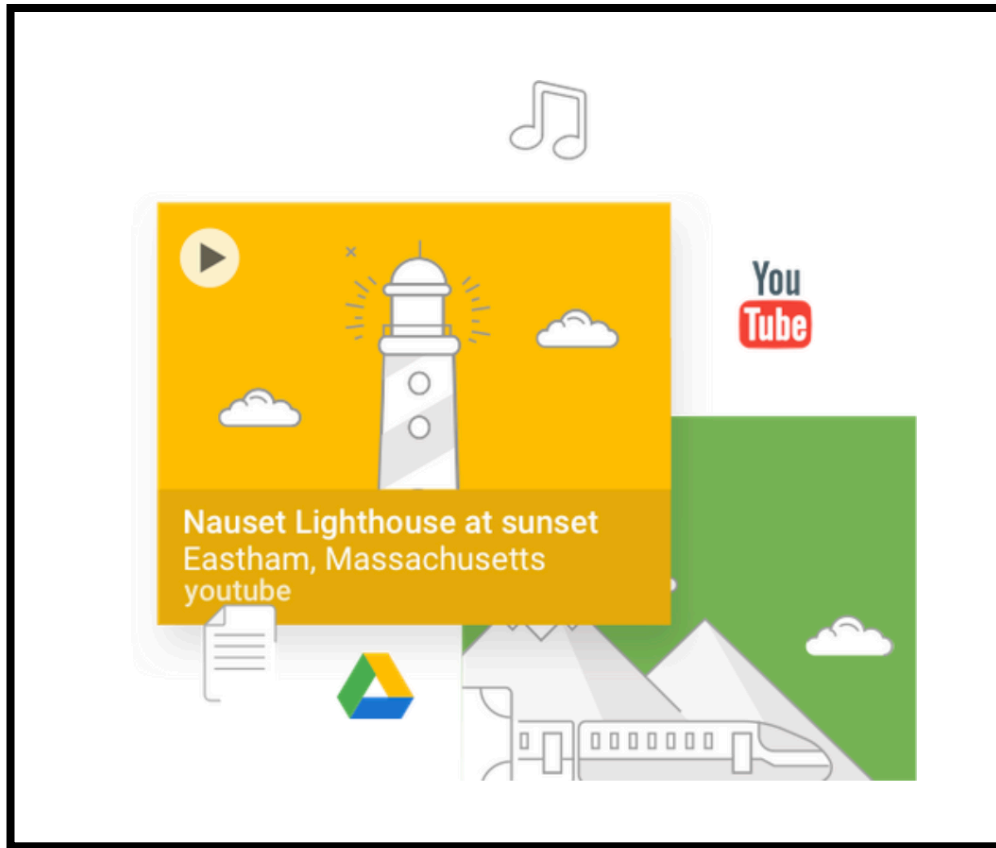


### 2. Invite

**Invite collaborators to add content, comment, like and make edits in real-time**

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Padlet : <https://padlet.com/>

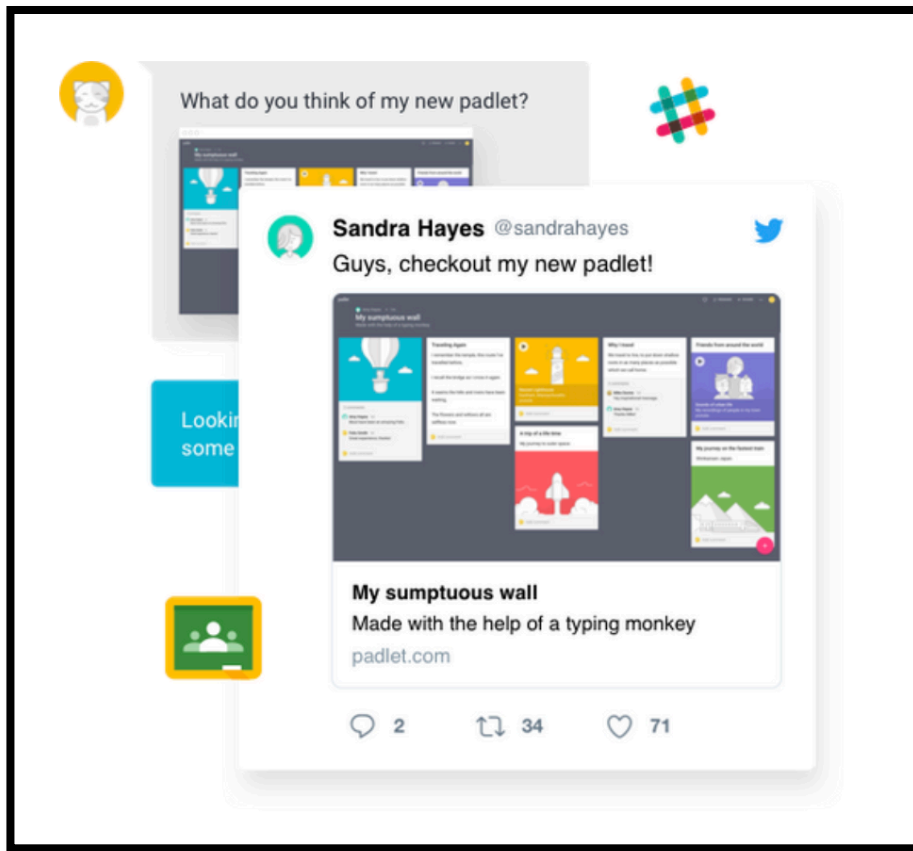


### 3. ADD 贴

**Add photos, documents, web links, video, and music to make the text come alive.**

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Padlet : <https://padlet.com/>

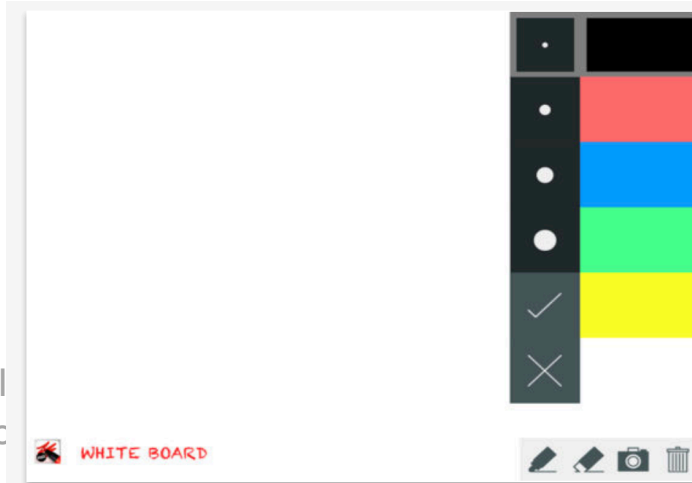
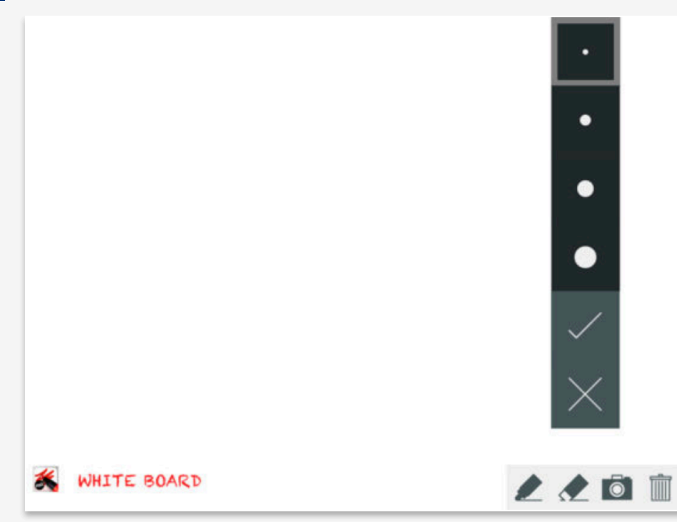
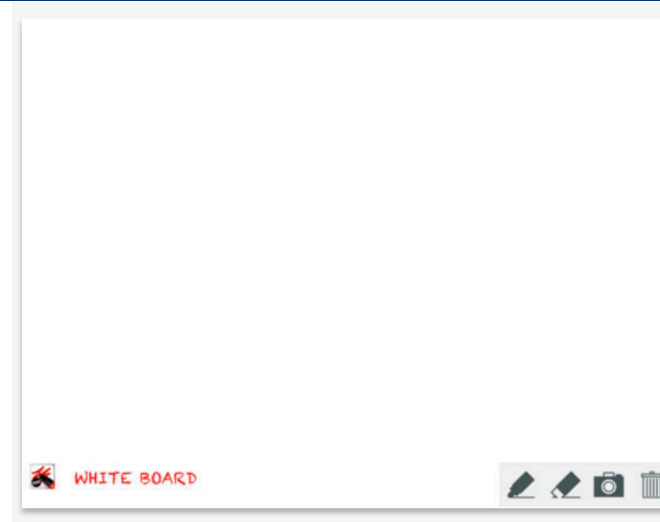


### 4. Share 分享

**Share your padlet with classmates and colleagues, friends and family, kittens and Kanye West.**

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

Whiteboard (iOS) : <https://itunes.apple.com/us/app/whiteboard/id537780132?mt=8>



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Google for Education

[https://edu.google.com/k-12-solutions/g-suite/?modal\\_active=none](https://edu.google.com/k-12-solutions/g-suite/?modal_active=none)

### Google for Education



- ◆ Google Drive: Teaching material sharing; Document management; Cloud-based access.
- ◆ Google Docs: Co-authoring and co-construction; Knowledge building; Peer review/assessment.
- ◆ Google Forms: Data collection; Data analysis;
- ◆ Google Draw: Mind-mapping; Illustration of ideas; Knowledge Building with non- verbal elements.



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Google for Education

[https://edu.google.com/k-12-solutions/g-suite/?modal\\_active=none](https://edu.google.com/k-12-solutions/g-suite/?modal_active=none)



#### Manage your classroom with ease

Create classes, distribute assignments, give quizzes, send feedback, and see everything in one place.



#### Administer with confidence

Add students, manage devices, and configure security and settings so your data stays safe.



#### Communicate your way

Connect with email, chat, and video conference.



#### Collaborate anywhere

Co-edit documents, spreadsheets, and presentations in real time.



#### Manage all your tasks

Build to-do lists, create task reminders, and schedule meetings.

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>

### Microsoft 365

- ◆ Microsoft One Drive/Share Point: Teaching material sharing; Document

- ◆ management; Cloud-based access.

Microsoft One Note: Sharing ideas; Sharing messages;

Microsoft Task/Calendar: Communication among team members; Project and time

- ◆ management.





## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>

Office 365

























我的 App

搜尋 App

預設順序

名稱 (遞增)

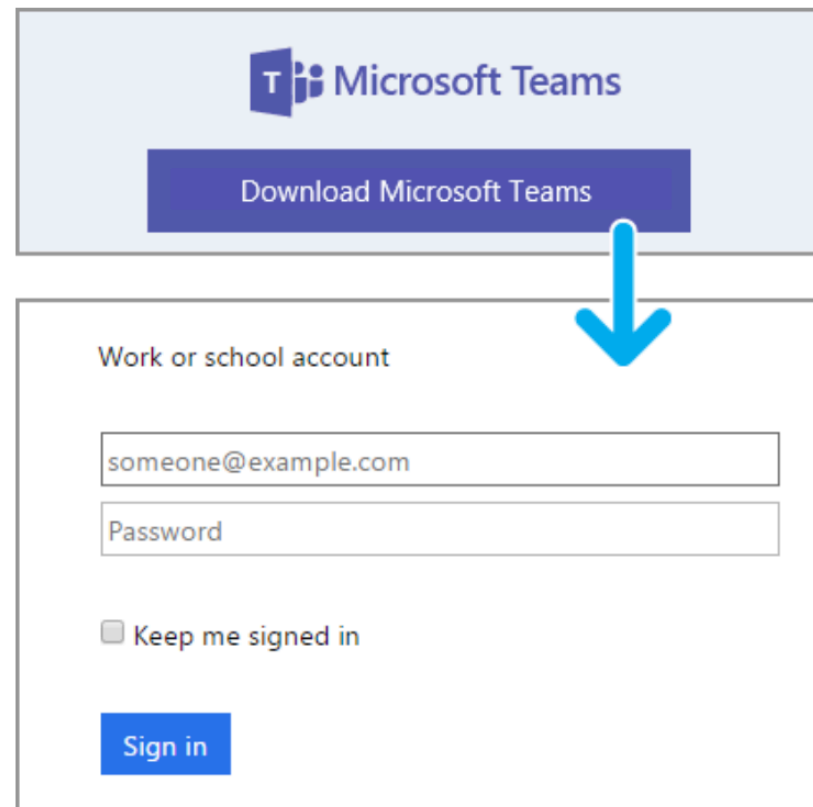
名稱 (遞減)

	OneNote		Class Notebook		Staff Notebook		郵件
	行事曆		Sway		Word		PowerPoint
	Excel		OneDrive		Forms		Planner
	人員		工作		Video		SharePoint
	Delve		新聞摘要		Yammer		PowerApps
	Flow		Stream		Teams		Dynamics 365

# Microsoft Teams

## 登入 Microsoft Teams

1. 前往 <https://teams.microsoft.com>
2. 使用公司或學校帳戶登入。



Microsoft Teams

Download Microsoft Teams

Work or school account

someone@example.com

Password

☐ Keep me signed in

Sign in

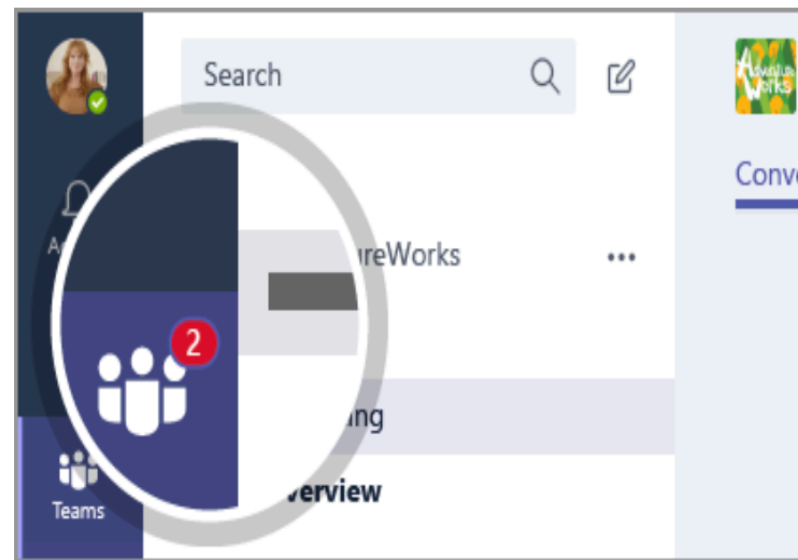
# Microsoft Teams

## 選取團隊和頻道

團隊可以匯集相關人員、交談、檔案和工具 — 全部集中在一處。頻道則是團隊的討論主題。熟悉團隊和頻道的最佳方式，就是選取團隊和頻道，然後開始探索。

選取 [團隊] 圖示

在團隊底下，選取頻道並查看頻道中的 [交談]、[檔案] 和 [記事] 索引標籤。



# Microsoft Teams : 交談

## 開始新的交談

當您有新的主題或想法要發表到團隊時，可以開始新的交談。

## 選取團隊和頻道

在 [開始新的交談] 方塊，新增您的訊息並按 Enter 鍵



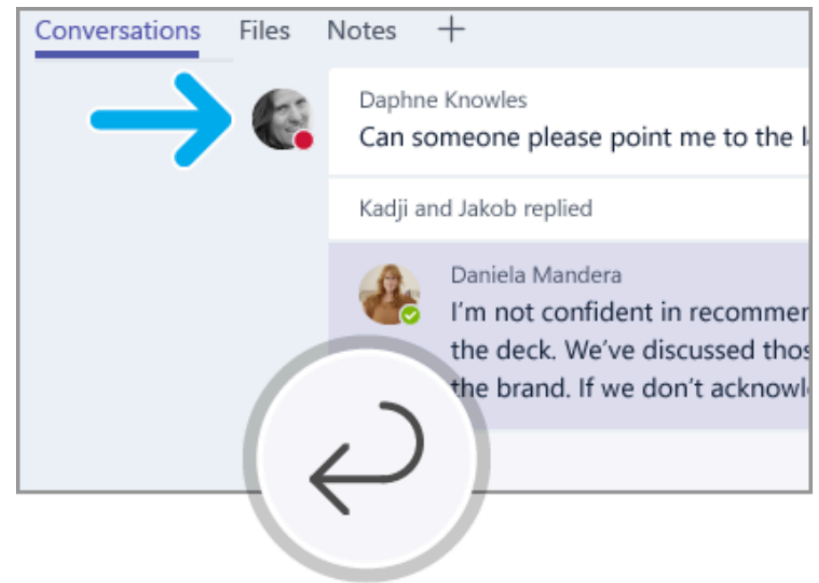
# Microsoft Teams : 交談

## 回覆交談

頻道中的交談會依日期、再依討論串分門別類。在往來交談中的回覆會歸類到初始交談底下，讓您可以更輕鬆地追蹤交談內容。

尋找您要回覆的交談討論串。

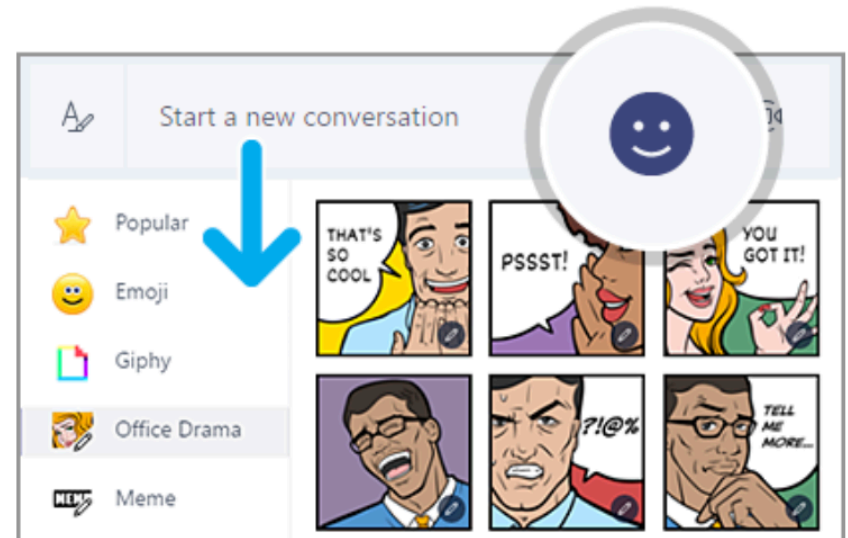
選取 [回覆]，新增您的訊息，然後按 Enter 鍵。



# Microsoft Teams : 交談

利用 Emoji、Meme 和貼圖增添樂趣 利用 Meme 和自訂的貼圖，來表達自我風格，並讓同事印象深刻。

選取 [團隊]，然後選取頻道。在撰寫訊息方塊/文字編輯器中選取選取以開啟 Fun Picker。。我們建議使用辦公室小劇場貼圖，所以請選取 [辦公室小劇場]。選取貼圖，輸入有趣的標題，然後選取 [完成]。在傳送訊息之前使用 @ 提及同事，然後按 Enter 鍵。



# Microsoft Teams: 共同作業

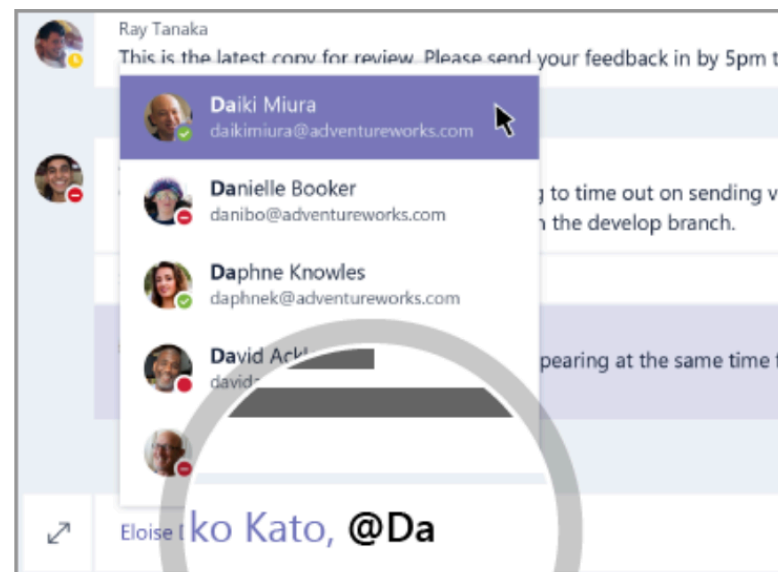
## 使用 @ 提及某人

如果您想要某人接收有關您傳送訊息的通知，您可以使用 @ 提及某人。您可以使用 @ 提及頻道、團隊、某個人或多個人。

在 [回覆] 或 [新交談] 方塊，輸入 @ 符號，然後輸入該人名字的前面幾個字母。

在 [建議] 方塊，選取人員。針對您想要使用 @ 提及的更多人員，重複上述動作。

對於您使用 @ 提及的人員，@ 符號會顯示在他們的 [頻道] 的訊息中和 [團隊] 圖示上。立即查看您的 [團隊] 圖示，查看某人是否使用 @ 提及您。



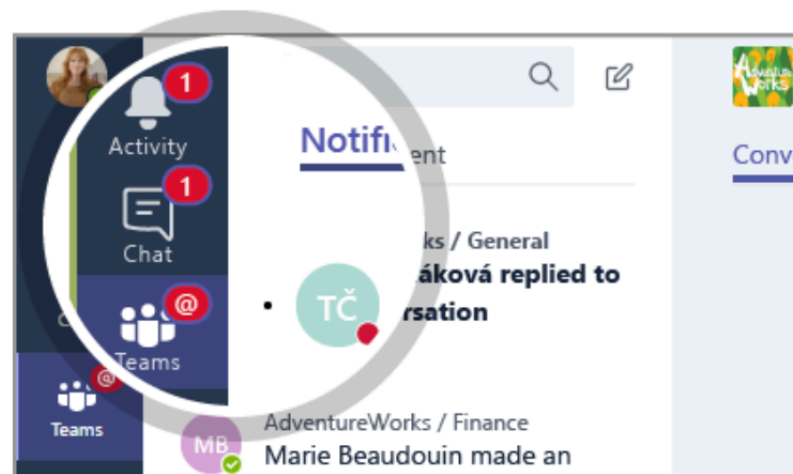
# Microsoft Teams: 共同作業

## 利用活動和通知隨時掌控全局

當有人使用 @ 提及您、有人對您的貼文按讚，或是有人回覆您開始的討論串，您都可以輕鬆地一覽無遺。在 [活動] 和 [聊天] 圖示上會顯示一個數字或遞增數字，而 @ 會出現在 [團隊] 圖示上。

選取 [活動] 圖示。

若要檢視適用於您的交談，請選取 [通知]。選取 [最近] 可檢視最新的團隊交談。



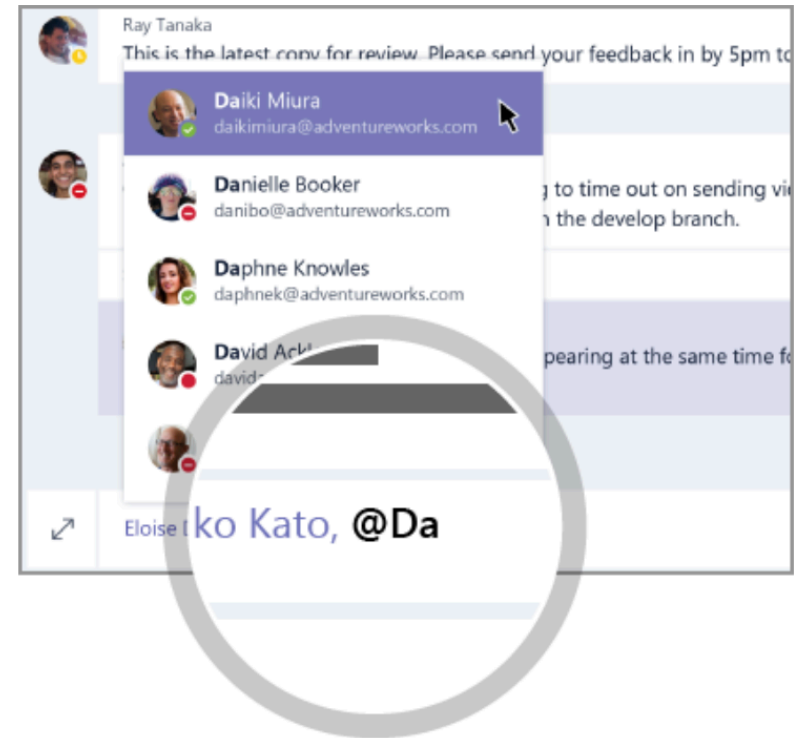


# Microsoft Teams: 共同作業

## 搜尋訊息、人員或檔案

您可以跨團隊、頻道和檔案進行搜尋。  
在 [搜尋] 方塊輸入詞句，然後選取 選取以開始搜尋。

- 選取 [訊息]、[人員] 或 [檔案]。
- 選取搜尋結果中的項目。您可以按一下 [篩選] 圖示來排序或篩選搜尋結果。



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

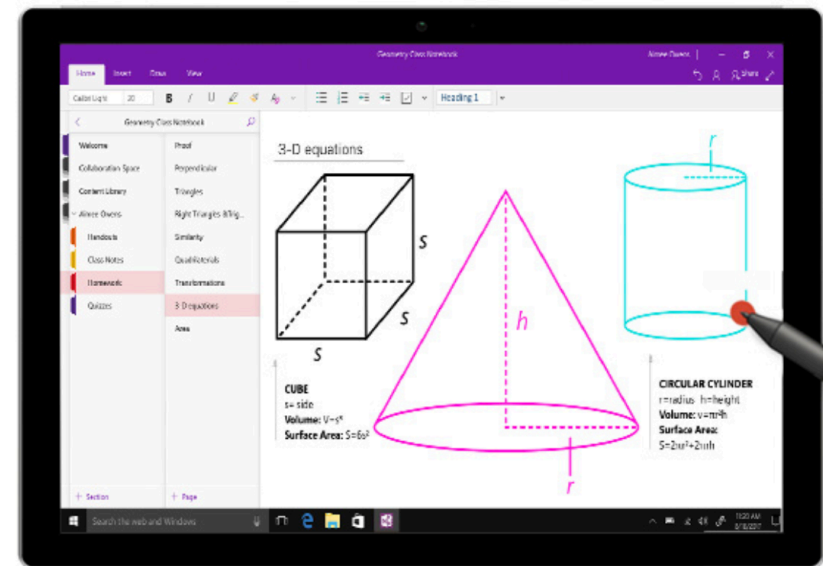
### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>

### OneNote—用於組織和協同合作的終極數位筆記本

利用手寫文字、網站內容，甚至是來自您裝置的音訊和視訊來組織課堂教材和準備作業。然後即可輕鬆與學生和同事協同合作。

探索 **ONENOTE** > 在這裡免費取得 **ONENOTE** 訓練 >



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>



### Microsoft Teams

Teams 是集合對話、內容和 app 的數位中心。教育者可以創造協同合作課堂教學、與專業學習社群連結，並與學校人員對話——全部透過 Office 365 教育版完成。

[瞭解詳情 >](#)

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>



### PowerPoint Online

- 使用專業的範本，只要幾分鐘就能將您的想法轉換成令人信服的簡報。全部免費。
- 使用動畫、轉場效果、相片和線上影片，讓您的投影片更加生動活潑。
- 無論您人在哪，都能同時與您的小組共同撰寫同一份簡報。

開始使用 PowerPoint

## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>

#### Excel Online

- 在熟悉的 Excel 試算表和活頁簿中整理和分析資料。所有變更都會在您輸入時自動儲存。
- 使用新式圖表和圖形以視覺化的方式呈現資訊，將多個數字欄轉換成有用的深入見解。
- 即時線上共同作業功能可確保每個人編輯最新版文件。

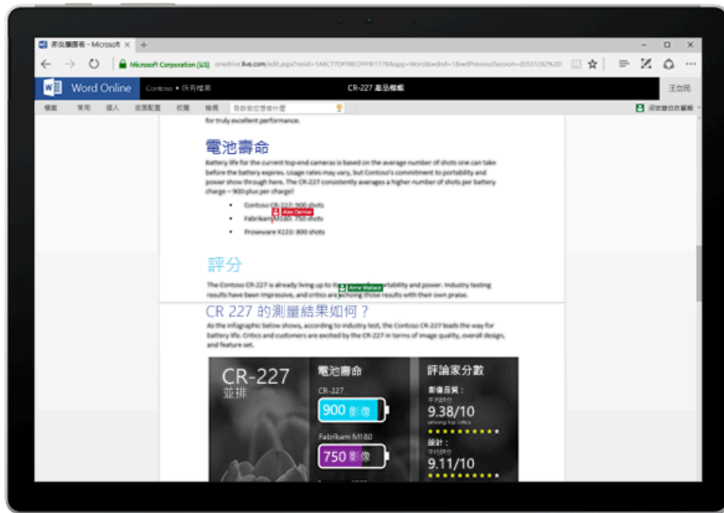
開始使用 Excel



## 4. Examples of Using CPS Apps/Platforms to Facilitate Collaborative Learning

### Microsoft for Education:

<https://www.microsoft.com/en-us/education/products/office/default.aspx>



### Word Online

- 建立並編輯外觀精美的履歷表、電子報和文件，並邀請其他人檢閱並即時共同撰寫。
- 使用免費範本節省時間，還包含針對 MLA、APA 和 Chicago 樣式需求所設計的格式設定工具。
- 運用免費的 Office 增益集額外增添功能，像是方便您撰寫文件時快速查詢資料的 Wikipedia 增益集。

開始使用 Word

## 5. Discussion on Assignment



## 5. Discussion on Assignment

- After completing the course, each participant is required to **design a lesson plan** that utilizes the **advantages of any CPS Apps/Platforms**.
- They have to prepare the preliminary ideas/elements and **complete their assignment on a word (template) file**.
- The requirements of this assignment includes:
  - Choose a **subject or KLA** that they teach based on the curriculum in Hong Kong;
  - Design a **lesson plan** on **either Google for Education** or **Microsoft 365** and state the corresponding features.





# 5. Discussion on Assignment

姓名	陳大文
班別	中四
科目	通識教育科
協作解難 教學活動	<p>認識可持續發展的市區更新策略</p> <p>探討如何在經濟發展與文化保育中作平衡</p> <p>課堂前：</p> <p>同學四人一組，根據不同持份者角色作分工</p> <p>建構不同持份者的論點論據</p> <p>課堂中：</p> <p>課堂中作互動探討，提出質詢</p> <p>課堂後：</p> <p>就不同持份者的論點論據作整合歸納，</p> <p>給建議有關當局如何優化策略</p>

協作解難 活動類型	Instructor- and Learner-implemented
協作解難 工具平台	<p>Padlet (建構知識、交流互動)</p> <p>Google Drive (Shared Document) 建立論點論據、分享</p>
電腦為本協作 解難帶來的好 處	<p>利用網絡環境</p> <p>隨時隨地進行學習</p> <p>利用網上資源及工具</p>
電腦為本協作 解難帶來的限 制	<p>輸入表達</p> <p>內容質素</p> <p>技術差異</p>

# 聯絡

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Email: [wallace\\_mhw@alumni.cuhk.net](mailto:wallace_mhw@alumni.cuhk.net)

