

# 「移動教室」： 帶領特教生與世界接軌

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## 融合教育：全校參與模式

香港特別行政區政府自1970年代已開始支援普通學校照顧有特殊教育需要的學生。隨後，在1997年9月更配合聯合國教育科學及文化組織的提倡，推行「**全校參與**」模式的融合教育，目的是提升本港融合教育的質素，使全港的普通學校都能接納學生的**多樣性**，因應學生的特殊教育需要，提供優質的教育服務，讓每一名學生都能發展潛能，亦促進全校師生互相尊重個別差異，共同締造共融的校園。



# 學習差異

每個學生都各具**獨特性**，各有不同的稟賦，性向、才情各有不同，智能、喜好也各有差異，而學習經歷、家庭、社會、經濟、文化等因素，都構成他們在**學習能力**、**學習興趣**、**學習風格**等的不同，並有不同的學習需要。

# 前言：教室中的客人



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## 「客人」產生的原因

- (一) 訊息接收與溝通的困難
- (二) 教材教法與學習能力的差距
- (三) 學習動機與態度的問題
- (四) 師生互動不佳的問題



(適異性教學的實施，國立臺灣師大特教系郭靜姿教授，2018)

# 前言：教室中的客人

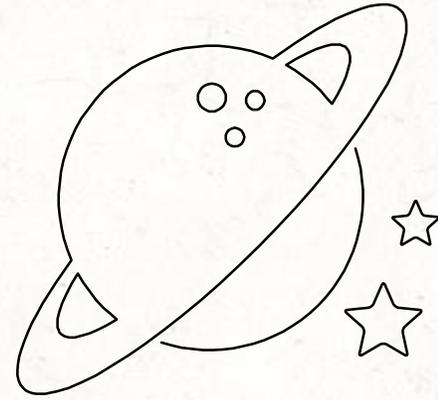
學習困難是「客人」  
出現的原因



然而，這是唯一的  
原因嗎？

學習超前，也是「客人」出現的原因

# 前言：教室中的客人



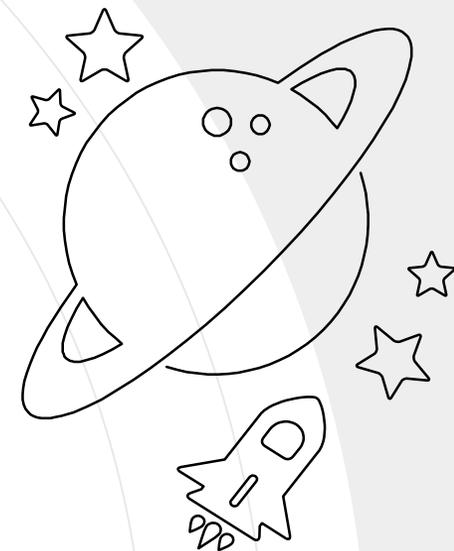
以學生為本，  
將學習的掌控權由老師  
還給學生，讓孩子  
不再是教室裡的客人

# 中學歷史課程學與教資源套 《如何在歷史課堂處理學習多樣性》

Source: [http://www.edb.gov.hk/tc/curriculum-development/kla/pshe/references-and-resources/history/cater\\_for\\_learning\\_diversity\\_in\\_hist\\_class.html](http://www.edb.gov.hk/tc/curriculum-development/kla/pshe/references-and-resources/history/cater_for_learning_diversity_in_hist_class.html)



# 適異教學 (Differentiated Instruction)



- 透過課程和教學設計
  - 照顧個別學生的**學習需要**
  - 提升每個學生的**學習成效**
- 照顧學習需要是發展校本課程的重要考慮因素。
- **Tomlinson**提出教師可根據學生需要，在以下三方面的課程元素中作出調整，以提升教學成效：
  - 1) **學習內容 (Content)**
  - 2) **學習過程 (Process)**
  - 3) **學習成果 (Product)**
- 適異教學是**以學生為本**的有效教學法。

# 適異教學 (Differentiated Instruction)

➤ 適異教學是**以學生為本**的有效教學法

## 1) **準備程度** (Readiness)

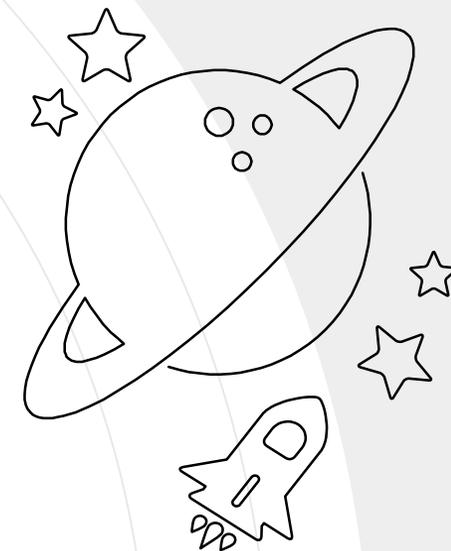
→ 對課堂的認識及所需技能

## 2) **興趣** (Interest)

→ 課堂的內容及表達方式可否引發興趣

## 3) **學習特性** (Learning Profile)

→ 課堂習作或任務可否令學生發揮所長



# 共通能力 (Generic skill)

運用資訊  
科技能力

研習能力

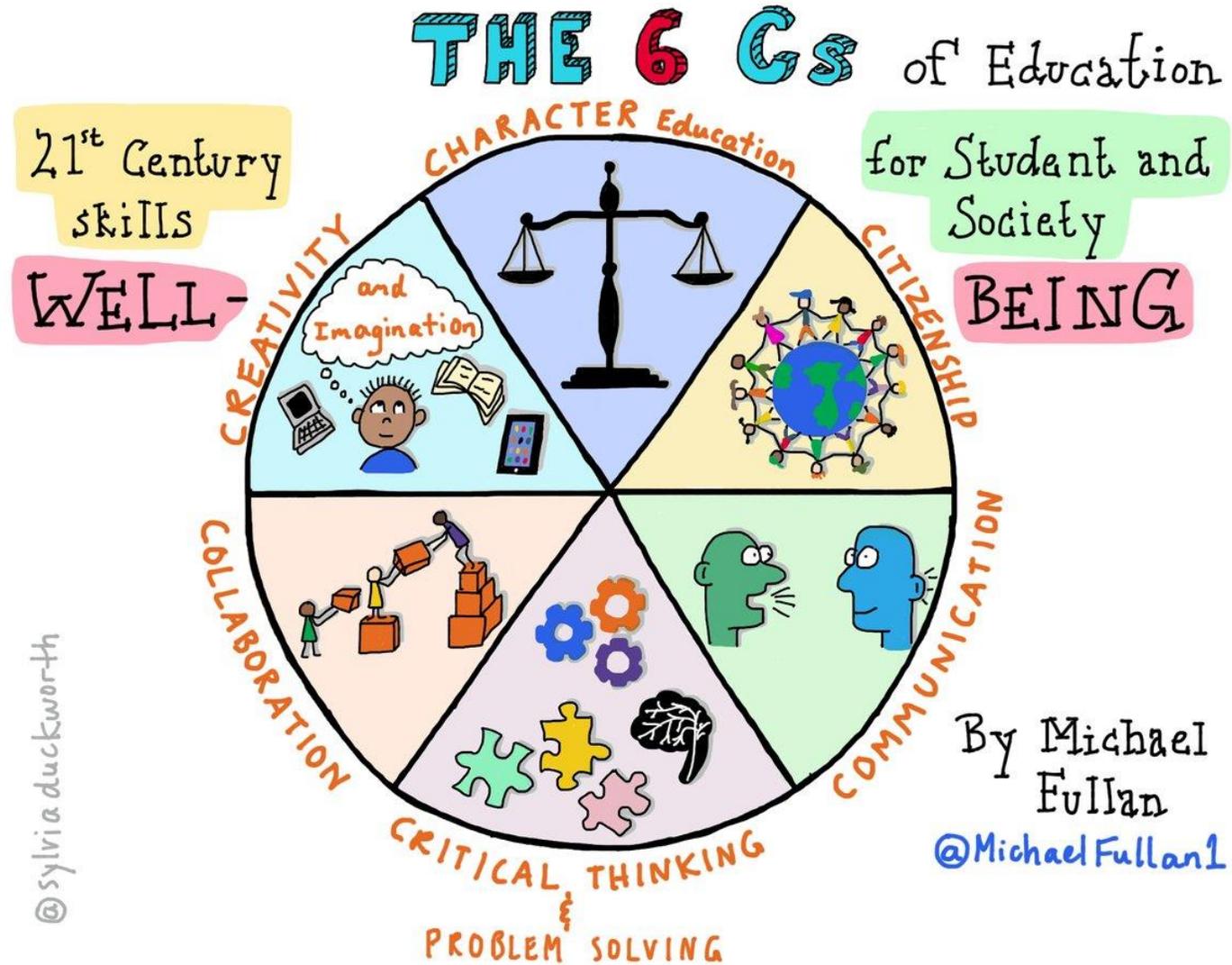
協作與  
溝通能力

創造力

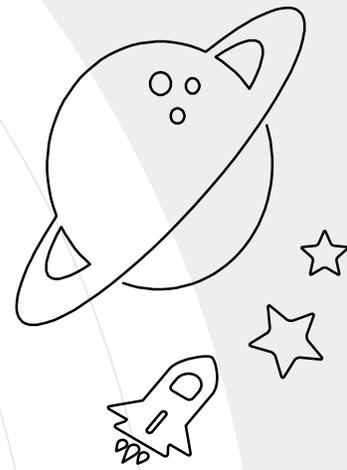
解難能力



# The six Cs of character education (Michael Fullan)



## 照顧學習差異 / 學習多樣性的方法，透過設計多元化的：



- 1) **課堂活動 (視聽型 / 書寫型 / 藝術型)** : Microsoft Teams 、 PowerPoint Recording 、 Nearpod 、 Flipgrid
- 2) **課業 / 家課 (程度 : 由淺入深)** : Sway 、 Teams 、 OneNote 、 Forms
- 3) **評估 (自評 / 互評)** : PowerPoint Recording 、 Socrative 、 Forms
- 4) **翻轉課堂 (Flipped Classroom)** : Skype 、 PowerPoint Recording 、 Teams
- 5) **自主學習 (同學自擬議題、進行探究式學習)** : Teams 、 Skype 、 PowerPoint Recording 、 Sway 、 OneNote 、 Forms
- 6) **成績分析及追蹤跟進** : Power BI

# 特教生：自閉症

自閉症是因腦部功能先天受損而引致的一種發展障礙，癥狀通常在幼童三歲前出現

患有自閉症的學生在日常生活中有三種障礙：

- 人際關係障礙
- 語言表達障礙
- 行為障礙



# 自閉症學生的學習特徵

## 認知方面

- ◆ 不容易明白事物的相關性

## 思維方面

- ◆ 較難明白抽象的概念或比喻
- ◆ 處理片面信息
- ◆ 較難在同一時間處理多項資料

## 注意力方面

- ◆ 將注意力錯放在一些不重要的細節
- ◆ 專注力不足



# 課堂教學策略：自閉症學生

有什麼方法可引起特教生的**學習興趣**  
及滿足他們的**學習需要**？



# Skype in the Classroom

A free global community that offers Virtual Field Trips, talks from Guest Speakers, and classroom connections!

[EXPLORE ACTIVITIES >](#)





Resource

### Getting Started With The NEW Skype In The Classroom

Skype in the Classroom is a global community that enables thousands of teachers to inspire the next generation of global citizens by participating in one of our live learning experi...

[View more](#)



Resource

### Resources To Prepare Your Skype Calls!

Preparation for the call is important. Explore all the available resources that will help you get your class ready for a Skype call. From an exemplary call etiquette, to student roles and ...

[View more](#)

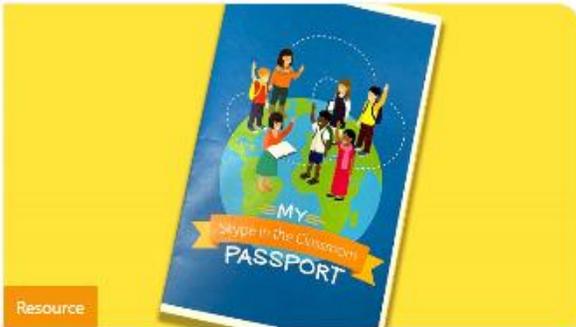


Resource

### Activity Plans

Use the activity plans for your favorite Skype in the Classroom activities aligned to ISTE standards. They were written by teachers to support you as you organize your live learning...

[View more](#)



Resource

### My Skype In The Classroom Passport

This passport is designed to make learning fun, engaging and create long lasting memories! Before and after each call, ask your students to fill in the passport with the new place they are...

[View more](#)



Resource

### On-Demand Events To Watch With Your Students

On-Demand Events to Watch With Your Students. From Dr. Jane Goodall to How to Train Your Dragon author and illustrator Cressida Cowell, Skype in the Classroom is ho...

[View more](#)



Resource

### Mystery Skype Resources

Are you a #MysterySkype fan or interested in finding out how to start playing this educational game with your students? Access FREE resources for you and your students her...

[View more](#)



# Joining the Skype in the Classroom Community

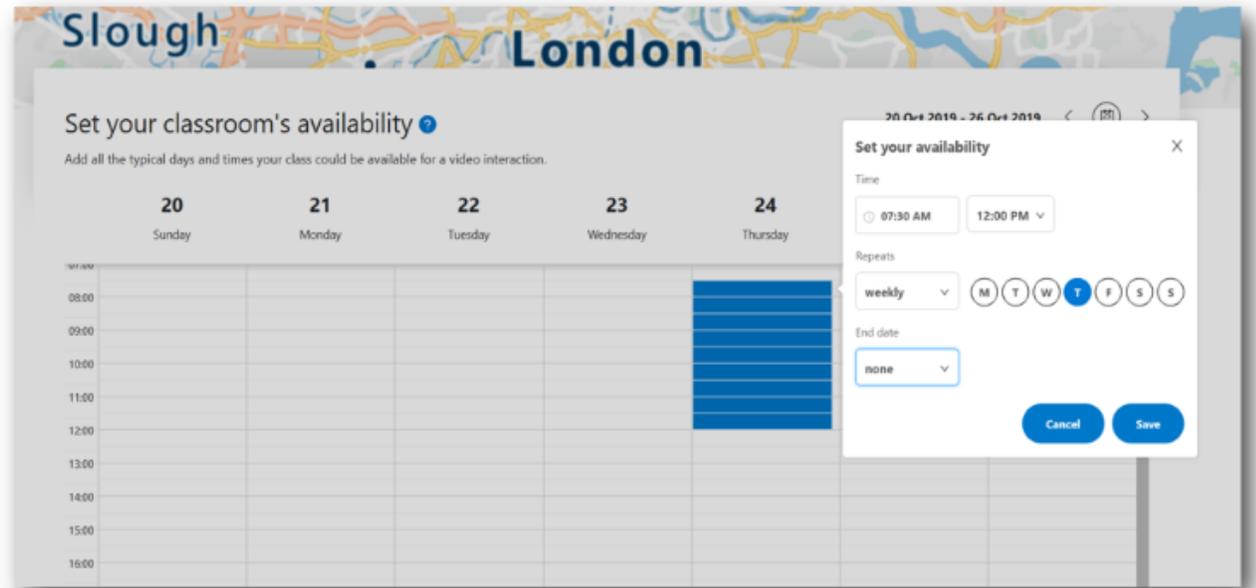
- 1 Visit [skypeintheclassroom.com](https://skypeintheclassroom.com)
- 2 If you are not a member already, then click to [Sign up for FREE!](#)
- 3 You will need to authenticate by using an Office 365 or Microsoft Account (MSA\*).

*\*MSA can be any account authenticated with Microsoft (Gmail, work account, Yahoo etc.)*

The screenshot shows the homepage of the Skype in the Classroom website. At the top, there is a navigation bar with the Microsoft logo, the site name "Skype in the Classroom", and links for "Find Activities & Classrooms", "Resources", "Support", and "Sign In". Below the navigation bar is a large banner image featuring a diverse group of children and an adult teacher waving. Underneath the banner is a search bar with the placeholder text "Search by session name, subject or any other keywords" and "Start Typing...". Below the search bar, there is a "Example" section with the text "authors, national parks, oceans, classrooms". The main heading "Skype in the Classroom" is centered, followed by the tagline "A free global community that fosters empathy and compassion for each other and our planet." At the bottom, there is a prominent blue button that says "Sign up for FREE".

# Set Your Classroom's Availability

- Add typical days and times your class is available for connections by clicking and dragging slots on the calendar.
- Other classrooms will be able to find you and request connections with you. Time zones are converted for you when you receive a request!
- You can add recurring availability or one-off time slots.
- You can add an end date and also remove specific slots for school breaks, holidays or other special events.



# Congratulations! Your Classroom is Ready!

- Your classroom is now visible on the site and other educators can find you and request a session with your class.
- You can make your classroom visible/not visible on the site anytime with the toggle on/off button.



Ages 8 – 11, London, United Kingdom

 **Iro Test, Educator**

Languages: [English](#)

[Classroom](#)

Looking to connect with classrooms around the world for a cultural exchange or Mystery Skype!

Make this classroom visible



**Student ages:** 8 – 11  
**Subjects:** [Science](#), [Animals](#), [Geography/Travel](#)  
**Number of students:** 20 to 30

# Finding an Activity

- Use the keyword search bar to find an activity for your class. Narrow results by using the filter options.
- Select the type of activity you want to participate in – virtual field trips, guest speakers, class connections.

The screenshot shows the Microsoft Skype in the Classroom search interface. At the top, the user is identified as Dyane Smokorowski, an Educator, with 2M views, 367 sessions, and 33 courses. The search bar contains the keyword "animals". On the left, a filter sidebar includes options for "Type of Results" (Guest Speaker Session, Virtual Field Trip, Classrooms / Mystery Skype, Collaborative Projects, Resources), "Filter by Subject", "Age Range" (0-18), "Duration of the Session (in minutes)" (15-120), "Days" (Before), "Availability" (From), "Country", and "Language(s)". The main area displays a grid of activity cards, each with a thumbnail image, a title, a brief description, and a "Request this activity" button. The cards include:

- Visit World-Famous Lake Tahoe**: Through an interactive videoconference, students will engage with Ranger Stephanie of California State Parks as she...
- Sea Turtle Tracks**: This program is led by an Education Specialist while on-site at Florida Oceanographic Coastal Center. Within our 750,000 gallon salt-water tank...
- 'Amazing Amazon' with author Christiane Dorion**: In this creative and engaging session students will discover the different layers of the rainforest, from the dark forest...
- Learn about issues facing our oceans with Pulitzer Center journalists**: From overfishing to climate change, our world's oceans face many hazards these days.
- Mystery Animal Skype for little ones! (K5 - Y1)**: We are a class in Buenos Aires (Argentina) and we are looking for global partners to play Mystery Animal Skype.
- All about Owls**: Learn about the owl species that are in Virginia and enjoy an in-depth exploration into the physical and behavioral adaptations of these top...
- Ages 10-11 from Wichita, Kansas, USA**: Educator: Stacey Ryan. Subject(s) of interest: Music, Animals.
- Ages 8-9 from Barshi, India**: Educator: Ranjit Dixale. Subject(s) of interest: Animals, Reading & Writing.
- Endemic Species of Galapagos**: In this lesson, students will learn about the geographic location of Galapagos archipelago, it's unique...

# Finding an Activity

- Open the activity page to find more info about experience or classroom you want to connect with and click the blue button to make a request.
- If you selected a collaborative project, you only need to click on the blue button that says, "Join the project" and you will be directed to join the project's Skype Group Chat. There is not a "Request process". Once you join the Skype Group Chat, introduce yourself, share pictures of your students' progress during the project and when you are ready, reach out to participants in the group and arrange a Skype call.

The screenshot shows the 'Sea Turtle Tracks' activity page. At the top, there is a header with the user's name 'Dyana Simonsworth', a '2M' badge, and '367' students. The main image is a large, detailed illustration of a sea turtle swimming in the ocean. Below the image, the title 'Sea Turtle Tracks' is followed by a 'Request this activity' button. The page includes a 'Resources' section with a 'Watch it first' video, 'Learning objectives' (learn about the biology, ecology, and life history of sea turtles; discuss the threats facing sea turtles; find out how you can help), and a 'Teacher notes' section with a video player.

This screenshot shows a classroom profile for Iro Stefanidou, a 'Guest speaker' from Birmingham, United Kingdom. The profile includes a 'Connect with this class' button, a photo of a group of students, and details such as 'Language: English', 'Additional resources: Skype in the Classroom - FAQs & Comments.pdf', 'Student ages: 9 - 14', 'Subjects: Animals', and 'Number of students: 60 to 80'.

The screenshot displays a collaborative project page titled 'Global Goals: Skype Collaboration - #TeachSDGs'. It features a header with the user's name 'Amy Rowlands, Educator', a '2M' badge, and '367' students. The main image shows a group of diverse children holding up cards. A 'Join this Project' button is prominently displayed. The page lists 'Learning objectives' (introduce Global Goals, partner with a class to create a project, practice communication skills) and a 'YouTube video' section with a play button icon.

# Requesting an Activity

- Select a few time slots from the host's approximate availability that work for your class. The host will either approve one or decline.
- If a slot is red, someone else has also requested it. The host will review all the requests and approve one.
- We recommend you request activities at least a week or two in advance.

The screenshot shows a user interface for requesting an activity. At the top, the user is identified as 'Iro Test, Educator' with statistics: 3461 Miles, 0 Sessions, and 0 Countries. The activity is titled '"Songwriting For Children"' with a 30-minute duration. The calendar view covers the week from Sunday, October 20 to Saturday, October 26, 2019. The time slots range from 12:00 to 21:00. Availability is shown as blue blocks, with a legend indicating 'Host's availability' (blue), 'In high demand' (red), and 'My request' (purple). Requests are visible on Wednesday and Thursday between 14:00 and 17:00. Navigation controls include a date range selector, a 'Week' view dropdown, and 'Cancel' and 'Continue' buttons at the bottom right.



# After the Call - Next Steps

Take photos, videos and share your adventures @SkypeClassroom using the hashtags  
[#SkypeClassroom](#) [#MicrosoftEDU](#)



**Todd Flory** @Todd\_Flory · Nov 2, 2018  
Students had a great time doing the Global Writing Exchange project with @mrs\_bodner! @SkypeClassroom #MIEExpert #MicrosoftEdu



🗨️ 🔄 ❤️ 8 📤



**Steve Auslander** @sauslander · May 15  
Two @msdwt Ss created a video about the need to protect endangered snow leopards! @snowleopards commented on that video and praised the kids. One thing lead to another. Today Matthias and Koustubh of Snow Leopard Trust Skyped w/our class and it was magical! @SkypeClassroom



🗨️ 2 🔄 3 ❤️ 26 📤



**Jamie Antoun** @TeachAntoun · Nov 5  
Wow! First Skype with Malaysia! Amazing! @SkypeClassroom #MSFTGlobalConnect #CYSDProud #SSSpirit



🗨️ 2 🔄 8 ❤️ 27 📤

# Microsoft Teams



使用桌面版應用程式來體驗最佳的 Teams 會議

下載 Windows 應用程式

改為加入 Web

已有 Teams 應用程式? 現在啟動

針對下列項目選擇您的音訊及視訊設定:

現在聚會



其他加入選項

音訊關閉

電話音訊

獲得最佳的體驗 登入 或 下載桌面版本

November 5-6, 2019

# Microsoft Global Learning Connection

OPEN HEARTS. OPEN MINDS.



# 「移動教室」：帶領特教生與世界接軌

Microsoft Global Learning Connection 2019：個案介紹

參與學校	蘇州北美國際高級中學 (Suzhou North America High School) 元朗商會中學
日期及時間	2019年11月5日 16:10-17:05
主題	1) AP Research 2) How pop culture influence the teenagers of today
語言	英語、普通話

# 學習歷程3步曲：

1 2 3

階段	同學的任務
前期	任務一：重溫 <b>已有知識</b> 任務二：腦力激盪提問法 任務三：議題預備課及 <b>擬訂探究焦點</b> 任務四： <b>小組分工</b> 及搜集所需資料
中期	任務一：自我介紹 任務二：小組口頭 <b>匯報</b> 任務三：學生 <b>提問</b> 任務四：互評及 <b>回饋</b>
後期	任務一：聯繫日常時事議題， <b>擴增體驗</b> 任務二： <b>反思</b>

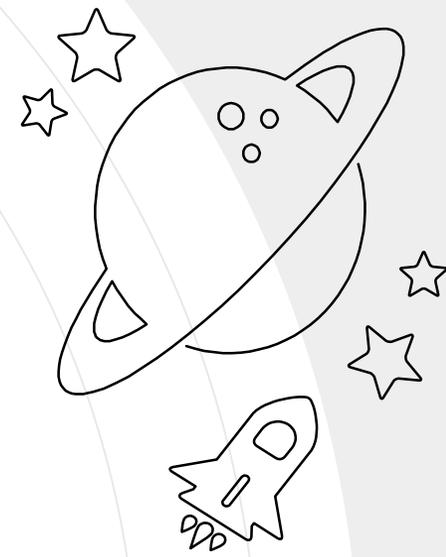
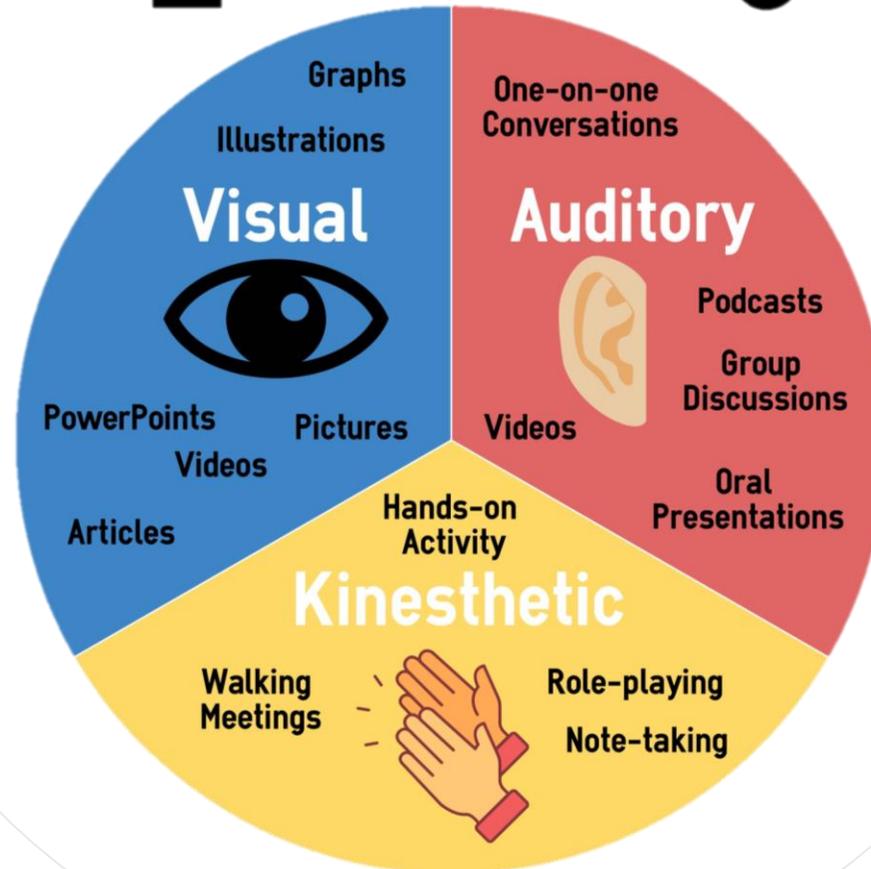
# 學習歷程3步曲：

1 2 3

階段	同學的任務
前期	任務一：重溫 <b>已有知識</b> 任務二：腦力激盪提問法 任務三：議題預備課及 <b>擬訂探究焦點</b> 任務四： <b>小組分工</b> 及搜集所需資料

# 適異教學 (Differentiated Instruction)

## LEARNING STYLES



# 興趣

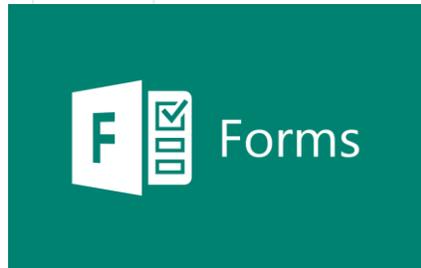
(Interest)

## Form A : Microsoft Forms

- Q1 我喜歡通識教育科。
- Q2 我喜歡有關人的故事。
- Q3 我喜歡在課堂上觀看視頻。
- Q4 我喜歡在互聯網上搜索信息。
- Q5 我喜歡角色扮演。
- Q6 我喜歡口頭匯報。
- Q7 我喜歡網上專題研習。
- Q8 我喜歡寫作。
- Q9 我喜歡延伸學習（例如：外出參觀、閱讀或創意寫作）
- Q10 我喜歡憑自己努力完成學習任務。
- Q11 我喜歡單獨工作。
- Q12 我喜歡小組工作。
- Q13 我需要明確的作業指示。
- Q14 我喜歡按自己的步伐或選擇來完成作業。

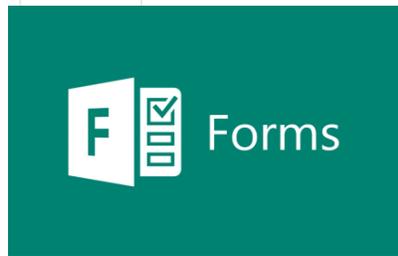
# 興趣 (Interest)

## Form A : Microsoft Forms



# 興趣 (Interest)

## Form A : Microsoft Forms

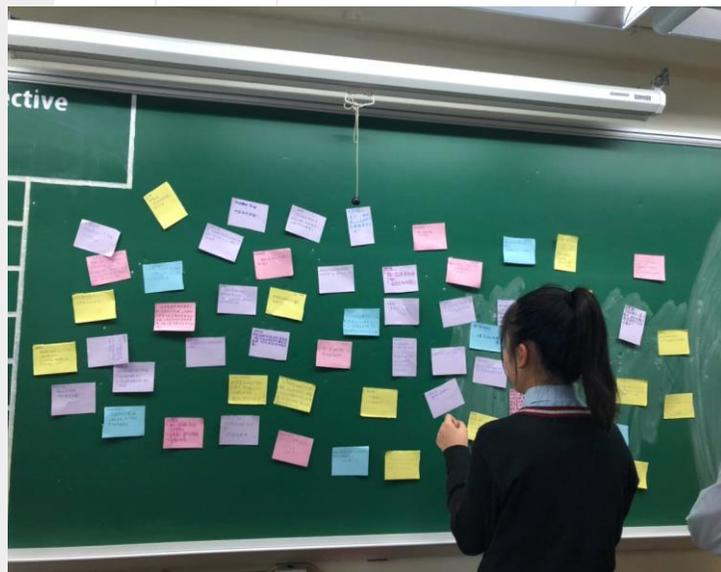


# 知識建構 (Knowledge Building)

知識建構的理論是由加拿大多倫多大學心理學教授 Carl Bereiter 及 Marlene Scardamalia 創建。他們提出知識建構與其他傳統學習活動的三個不同之處：

- (1) 學生及組內的伙伴需要為提升各成員的知識水平負上責任，注重知識建構的**過程**及**共同成果**
- (2) 對學生而言學懂課程內容並不是教育的終點，反而如何在學習的過程作出**貢獻**更為重要
- (3) 於知識建構活動裡，學生**提出自己的問題**和意見，就別人的意見作補充、澄清別人的質疑，總結大家的知識和看法，使整個團體能夠**共同進步**。

- ✓ 建構新知理論所關注的重點是意念的**創造**與**改良**
- ✓ 傳統教育所關注的是個人擁有的知識，建構新知理論卻是建基於**群體共同創造知識**
- ✓ 正正反映二十一世紀知識型社會所著重的能力



## 重新思考教師的角色

因應不同學習及教學策略的需要，改變教師、家長和學生的角色是很重要的。教師的角色可由傳授已確立的真理和知識的角色，轉變為資訊提供者、學習推動者、顧問、輔導者、評估者等多種角色。

例如：

教師的角色	行動
知識傳授者	講學
學習促進者	與學生討論
資訊提供者	給學生有關學習資源的意見
輔導者	給學生有關培養興趣的意見
評估者	讓學生知道自己的進展

學生的學習態度和能力往往受家庭背景、個人經驗及日常生活環境所影響。教師須了解學生，並與輔導人員、家長、同儕、社工和社群協作，採取適當的措施作支援，照顧學生的需要。

# 學習歷程3步曲：

1 2 3

階段	同學的任務
中期	任務一：自我介紹 任務二：小組口頭匯報 任務三：學生提問 任務四：互評及回饋

# 自閉症學生在視像學習遇到的困難

## 適應能力方面

- ◆ 自閉症學生習慣穩定而有規律的學習環境，不容易適應轉變

## 溝通能力方面

- ◆ 面對突如其來的問題，自閉症學生難以清晰表達想法

## 思維方面

- ◆ 較難在同一時間處理多項資料

## 注意力方面

- ◆ 將注意力錯放在一些不重要的細節
- ◆ 專注力不足



## 課堂教學策略：自閉症學生

由於自閉症學生在**理解、溝通、認知**等各方面一般都有困難，教師宜在課堂教學中作以下安排：

- 提供穩定而有規律的學習環境，因為自閉症學生不容易適應轉變；  
**作出轉變前，教師宜告訴學生轉變的性質和原因**
- 自閉症學生所了解的世界是由許多獨立的小環節組成，他們往往不能掌握事情的因果關係，教師要盡量引導學生全面審視問題。  
例如利用「**六何法**」：

- ✓ What (何事)
- ✓ Why (為何)
- ✓ Who (何人)
- ✓ When (何時)
- ✓ Where (何地)
- ✓ How (如何)

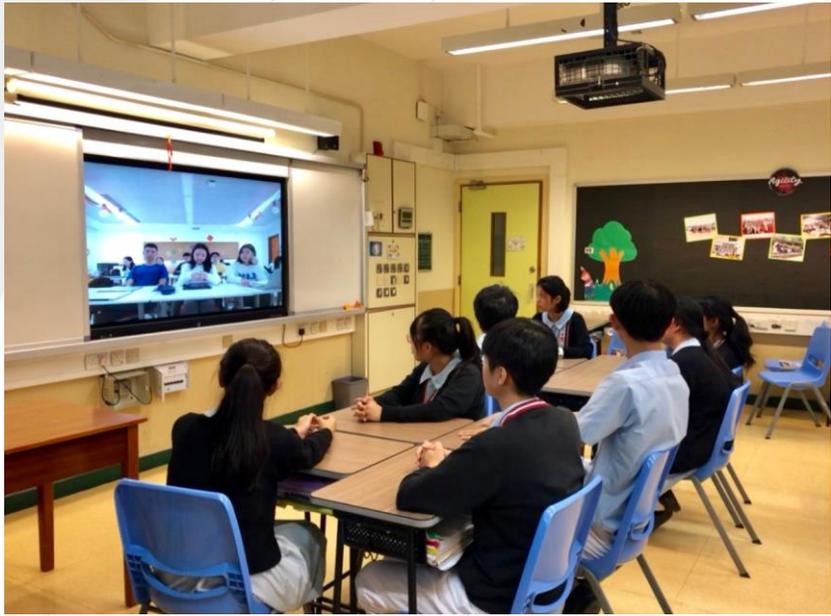


## 課堂教學策略：自閉症學生

- 自閉症學生感興趣的題材可能與一般學生不同。把學習訊息融入他們感興趣的學習活動，可以提高學習成效。例如：透過學生感興趣的**視頻、錄像、圖像或音樂旋律**帶出學習主題
- 善用**多感官學習活動**，以加強理解和體驗
- 教學計劃的設計應該是學生可以掌握的個別活動，讓他們可以**從一個小階段循序漸進到下一個階段**，逐步完成各項目標
- 如果學生不明白抽象的概念，可能會**口頭重複**一些資料，不要因為學生口頭重複這些資料而假設他們已能掌握概念，應盡可能提供**具體的例子**去幫助理解







# 學習歷程3步曲：

1 2 3

階段	同學的任務
後期	任務一：聯繫日常時事議題， <b>擴增體驗</b> 任務二： <b>反思</b>

# 反思



# 聯繫日常時事議題，擴增體驗

## 通識教育科專題探究活動及成果展示分享會： 元朗地區考察

**元朗商會中學**

**以緊扣學科的全方位學習  
促進全人發展**



● (左起) 科主任黃鳳鳴、校長丘志良及關子倫老師。

中學是學生個人成長的重要階段，在這時期，學生會發展出未來投身社會時需要的技巧，如溝通能力、批判性思考、獨立處事能力等等。

在這些方面，課堂以外的學習扮演著重要角色，然而，這些活動往往是單次性的，又或是數量太多，而且與課堂學習較為割裂，教師往往投放大量精力於籌辦活動，但學習效能卻不成正比。

為此，元朗商會中學在 QSHK 協助下，嘗試把學科學習與課室以外的活動結合，發展為與課程緊扣的全方位學習，在照顧學科學習需要的同時，也能促進學生的全人發展。每年皆舉辦的其他學習經歷日 (OLE Day)，便是一個很好的例子。



元朗商會中學

● 學生到街市進行通識科的獨立專題探究。

你認為天水圍財團管轄的街市，及元朗合益街市的衛生設施如何？  
你怎樣評價上述兩個街市的物價？  
你覺得上述街市有甚麼地方可以改善？

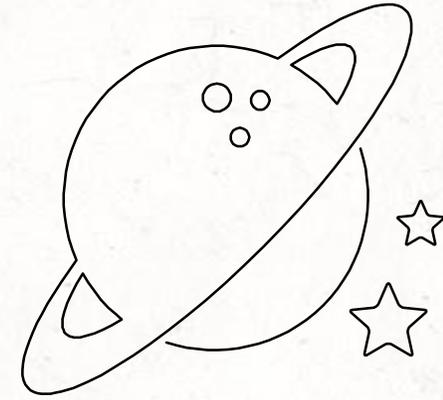
這一天，元朗商會中學中五級學生，正忙於穿梭兩個街市，他們不是替街市管理而進行市場調查，而是在進行通識科的獨立專題探究 (IES)。

「我們正在透過外出考察，學習不同的 IES 技巧。」中五學生們道。

## 元朗商會中學 香港中學文憑考試 2021 通識教育科 獨立專題探究手冊

姓名：.....  
班別：.....  
班號：.....

# 總結：學生不再是教室中的客人



以學生為本，  
將學習的掌控權由老師  
還給學生，讓孩子  
不再是教室裡的客人



謝謝！

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