

# 資訊科技教育教學法系列： 在中學策略性運用**移動學習**設計教學活動 以提升學生的參與及學習效能 **第一節**



香港中文大學 學習科學與科技中心 (CLST)

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



# 中學 AB 班

第一節：

日期：2018/06/04 (星期一)

時間：18:30 - 21:30

地點：香港中文大學崇基校園信和樓614

第二節：

日期：2018/06/11 (星期一)

時間：18:30 - 21:30

地點：香港中文大學崇基校園信和樓614





# 導師簡介

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行政長官卓越教育獎秘書處

專研： 網絡探究 WebQuest

資訊素養 Information Literacy

教育遊戲 Game-based Learning

網誌教學 Blog-based Learning

移動學習 Mobile Learning

翻轉教學 Flipped Learning

自主學習 Self-directed Learning

Centre for Learning Sciences and Technologies (CLST)  
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# 課程目標

本課程旨在介紹如何於中學運用移動學習來提升學生的參與度和學習效能。

透過本課程讓學員：

- a) 了解用於流動學習活動的**免費資訊科技工具**的學習機會，特點，優勢和局限性；
- b) 從中學生流動**學習活動案例**的教學方法和學習效能，了解移動學習的良好活動設計，如：全方位學習和戶外學習、鄰舍和社區研究、城市尋寶和郊野實地考察；
- c) 運用各種資訊科技**工具創建和修改簡單的移動學習活動**，如：電子羅盤、測量工具、定位應用程式、數據收集應用程式、思維導圖工具、網上論壇、溝通工具、協作工具和其他用於移動學習的資訊科技工具；及
- d) 運用合適的**電子評估工具**，監測和衡量學習成果。

# 第一節

1. 移動學習的作用和重要性
2. 全方位學習 (LWL) 和移動學習概述
3. 配合 CUHK CLST EduVenture 和 Environmental Systems Research Institute (ESRI) Survey123 學習系統的探究式學習 (IBL)
4. 香港中文大學戶外考察
5. 課業簡介



## 第二節

1. 課業討論及回饋
2. 運用EduVenture Composer創建地圖數據/熱點和多媒體內容
3. 介紹用於環境調查的電子傳感器和可編程設備
4. 不同科目運用移動學習的教學案例的討論
5. 賬戶管理和設備的安排
6. 介紹移動學習活動的替代方案
7. 課程總結

# 1.移動學習的作用和重要性

## 移動學習 定義

Clark Quinn (2000) ，行動學習就是透過**行動輔具**：如個人數位助理、行動電話等，**進行電子化學習**。

Harris (2001) 認為 **學習透過點與點交集的概念**，認為行動學習即是**行動科技與網路學習** 的交集點，然後創造**不受時間、地點限制**的學習經驗。

Topland(2002) 則從學習的**管道定義**行動學習，認為行動學習是**多種管道式 (Multi-Channel)**的**網路學習**，透過行動電話、個人數位助理、可攜式 的筆記型電腦或平板電腦等管道進行學習活動。



## 移動學習 優勢

- Learning Path
- Performance Support
- Higher Engagement
- Multi-Device Support
- Collaborative Learning
- Better Completion Rate and Higher Retention
- Flexibility to Learners

## 7 Benefits of Mobile Learning Over Traditional eLearning

**Performance Support**  
mLearning is ideal for performance support intervention as learners have easy access to information while at work. This leads to increased usage and retrieval.

**Multi-Device Support**  
The same course is available on varied devices ranging from PCs and laptops to tablets and smartphones.

**Better Completion Rates and Higher Retention**  
The bite-sized or microlearning approach makes it easier for learners to initiate, complete, and retain learning better.

### 1 Learning Path

Mobile devices can be used to update learners on their “learning path” thereby facilitating “learning as a continuum”.

### 2 Higher Engagement

The training experience is more immersive and completion rates are higher as compared to traditional eLearning.

### 3 Collaborative Learning

It is a great way to engage with peers to share learning experiences and be part of communities of specific practices.

### 4 Flexibility to Learners

With mLearning, learners have the flexibility of learning “anytime, anywhere” on the device of their choice and in varied formats.



# Why is Mobile Learning so Effective?

- Convenience
- Duration
- Focus
- Microlearning
- Distribution
- Content Evolution

## WHY IS MOBILE LEARNING SO EFFECTIVE?

### MOBILE LEARNING Infographic



#### Convenience

All the required learning and compliance training at the tip of your workforce's fingertips.



#### Duration

Short and concise courses; allow for broader participation and motivate users.



#### Focus

Effective mobile learnings highlight specific learning objectives. This type of focus allows for greater overall comprehension and delivery.



#### Microlearning

Brief focused learning modules can be created to further the knowledge obtained via additional mediums.



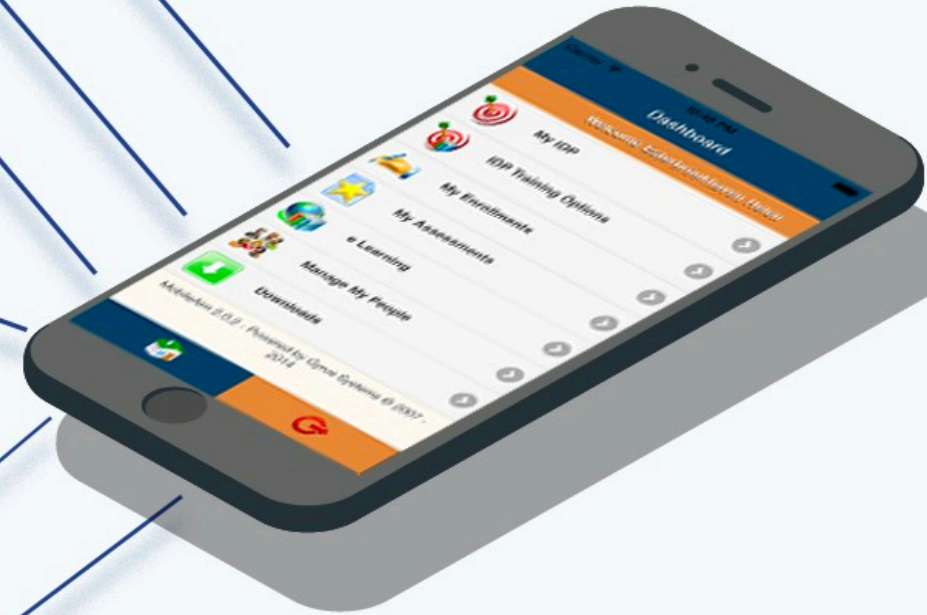
#### Distribution

Instantly and globally make available learnings that will immediately impact your program.



#### Content Evolution

With the growth of the platforms themselves, we experience grander content capabilities. Modern, more dynamic content allows for a greater utilization of media and ultimately superior effectiveness.



### Summary

Mobile learning is really gaining a foothold in the industry and is continuing to become a vital component of a well-rounded blended learning environment. With continuous growth on the distant horizon and traits and features such as these, it is hard to imagine it showing any signs of slowing. If your organization currently excludes mobile learnings and you are interested in its value going forward; be sure to tune into the Gyrus Systems Blog, as we will continue to explore this captivating topic.

## 戶外學習在課程中的角色與重要性

對於學習而言，只有在真正的走出教室，利用戶外的實地考察活動才能提供學生認識周遭環境的機會，讓學生在戶外**親身體驗**，進行**親自動手做**和**探究式的學習**，才能落實現實世界中學習的統特質，也才能真正達成**統整概念**的建立 (Landis 1996)

只有在戶外環境下，透過觀察的技巧，學生能夠看見、聽見、感覺，以一種**有意義**和活生生的經驗來學習，很自然的將學習和科目間統整在一起，可以增加學生對整個概念的了解，進一步**將學科知識在現實生活中相互印證**



## 戶外學習在課程中的角色與重要性

戶外教學所提供的學習經驗，不會讓學生被限制在某一個學科課題的學習上，反而可以在完整的脈絡中全面看到一個完整的學科，結果會使學科變得更有意義、更有趣，而這正是透過「野外考察」的方式學習時才能達成的統整學習。

「戶外教學」不止對地理及生物等地球科學重要，對不同學習領域都息息相關，所以「戶外教學」應該要落實到「每所學校」的「每個班級」的「每個同學」。

### 第三個資訊科技教育策略

「資訊科技有無限發展空間……我們發現，兩個主要發展趨勢正在影響着學習環境……另一個趨勢是流動學習。」

這種學習模式一般泛指在教學上應用流動科技，以便「隨時隨地學習」……包括課室回應系統、配備標準軟件的手提電腦及平板電腦、便攜式電子白板、發送至手提電話的文字訊息提示、利用無線裝置進行小組學習、多媒體博物館導賞，以及透過手提電話隨時隨地進行學習……強調……多元化的學習模式。」(教育局，2007)

## 第四個資訊科技教育策略

### 流動科技

流動電腦裝置的普及引領我們進入後電腦時代。流動科技不單能讓學生隨時隨地從互聯網上得到各種學習資源，也能促進師生間的溝通及互動。

學生能便捷地與同儕及老師分享知識及交流意見，而教師亦可扮演顧問的角色，與學生建立學習夥伴的關係。當資訊科技衍生的學習機會增加，學生會逐漸培養對個人學習負責的態度及習慣，進而成為自主學習者。



## 第四個資訊科技教育策略

後個人電腦時代是一種市場趨勢，大部份用家最後會選用流動裝置如智能電話及平板電腦等

取代個人電腦成為首要的電腦裝置。這些裝置著重**便攜和連接性**，包括**雲端服務**的使用、更專門的**應用程式**以執行任務，以及在多種裝置之間同步而無縫地處理資訊。(Isaacson, 2011)

## 第四個資訊科技教育策略

### 自主學習及共通能力

廣義而言自主學習涵蓋一系列**學習過程**和**學習活動**，學生可自發設計及負責自己的學習經歷，也能透過不同渠道，隨時隨地選擇、管理及評估屬於自己的學習。

自主學習有助加強學生的**學習動機**，培養他們對自學的正面態度，並能提升學生的自尊、**批判思考**能力、**解難能力**和其他**高階思考**能力。

## 第四個資訊科技教育策略

在應用資訊科技的情況下，自主學習大致有四種特徵

- 學習者的**控制**；
- 學習者的**自我管理**；
- 個人**自主**；及
- 真正學習自主 (Tendency of self-learning)：
- 在正規學習環境以外，**對學習的追求**。

# 關愛基金援助項目 資助清貧中小學生購買流動 電腦裝置以實踐電子學習

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ITE-CCF/ccf\\_index.html](http://www.edb.gov.hk/tc/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/ITE-CCF/ccf_index.html)

## 關愛基金援助項目–資助清貧中小學生購買流動電腦裝置以實踐電子學習

### 背景及目的

教育局於2015/16 學年起推行「第四個資訊科技教育策略」，為全港公營中小學校建立無線網絡校園，以便學生在課堂上使用流動電腦裝置進行電子學習。部分學校開始推行學生「自攜裝置」政策，以進一步發揮使用流動電腦裝置進行學習的優勢。鑑於「自攜裝置」的發展有可能為低收入家庭的學生增加經濟壓力，因此關愛基金於2018/19學年起推行這援助項目，為期三年，資助這些學生，購買流動電腦裝置。

### 合資格的受惠對象

受惠對象必須符合以下條件：

1. 就讀官立、資助（包括特殊學校）、按位津貼或直接資助計劃的中小學；並正領取由社會福利署發放的綜合社會保障援助(綜援)，或領取在職家庭及學生資助事務處轄下的學生資助處的學校書簿津貼計劃全額資助（全津）或半額資助（半津）；及
2. 就讀的學校及班別正推行電子學習，並建議學生自攜流動電腦裝置。

### 資助用途

在建議項目的三年推行期內，每名受惠學生只可接受資助一次。資助金額可用於購買流動電腦裝置、在產品安裝學校所需的流動裝置管理系統、其他基本配件（例如螢幕保護貼及裝置保護套），以及三年產品保養。

### 資助金額

綜援及全津學生可獲得全額資助以購買上述產品，項目首年資助金額上限為4,500元。換言之，資助金額是購買上述產品的實際費用或4,500元，以較低者為準。半津學生則獲得半額資助，資助金額上限則為2,250元。資助上限每年會按綜合消費物價指數調整。

### 資助發放方法

為確保基金撥款直接用於資助清貧中小學生購買適用於學校推行電子學習的流動電腦裝置，教育局會向學校發放資助，由學校代學生購買裝置。學校可按本身電子學習的設計和學生需要，自行訂立產品規格，由學校代學生進行集體採購。

### 推行期

由於學校推行電子學習的步伐不同，並且有自己的政策和時間表推行「自攜裝置」，因此學校可由2018/19學年開始分階段參與項目。

教育局會於稍後發出有關通函及舉辦有關簡介會，以通知學校有關項目的詳情，並將會邀請擬於2018/19學年推行「自攜裝置」政策的學校參加項目。

教育局會根據學校所估算的受惠學生數目，於2018年8月底向學校發放初步資助，讓學校進行採購活動。然後根據實際受惠學生數目調整資助金額。

### 查詢

如有查詢，請致電3698 3584與教育局資訊科技教育組聯絡。

## 戶外考察主要有哪幾類？

- 實地導賞 (Field Excursion)
- 驗證假設的實地研究 (Hypothesis Testing)
- 探究式實地考察 (Enquiry Fieldwork)
- 發現式實地考察 (Discovery Fieldwork)
- 感官實地考察 (Sensory Fieldwork)

上述的策略或取向並**不是互相排斥**的。

所以教師在設計實地考察時，應該先考慮課程的要求及學生的需要、興趣和能力，才決定以上述任何**一種或混合多種**取向來設計和組織實地考察。



# 實地考察



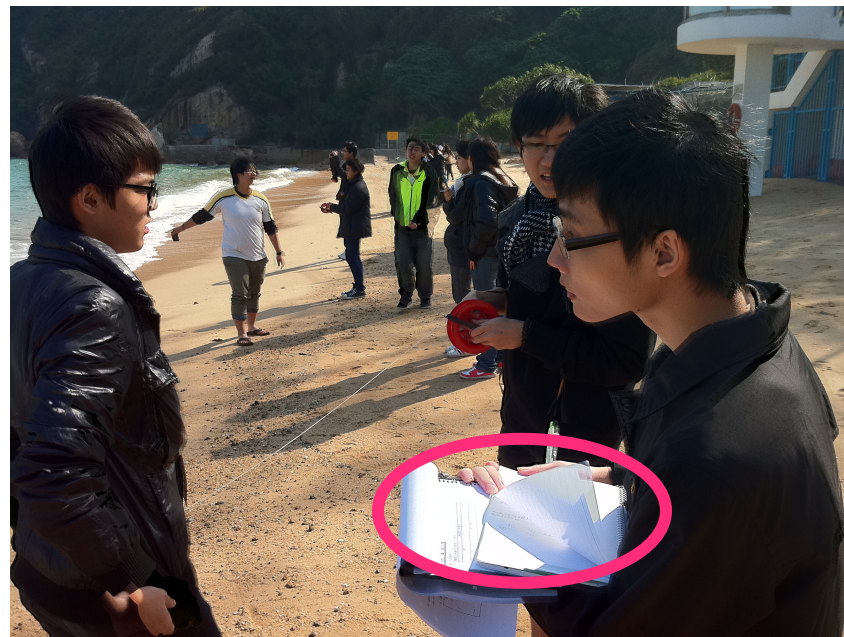


# 實地考察





## 實地考察



# 實地考察





## 探究為本實地考察研究

以學生為中心的探究為本實地考察是指由同學自行主導的地理探究。這類實地考察的指引較少及較開放，讓學生能全面地建立探究能力、考察技能及共通能力。

這類實地考察可分為五個主要的階段：

- 第一階段 — 計畫與準備
- 第二階段 — 數據蒐集
- 第三階段 — 數據處理、演示及分析
- 第四階段 — 闡釋與總結
- 第五階段 — 評價

## 階段 (a) 計劃及準備

1. 識別一個議題、問題、現象和/或設定一個有**探究價值**的假設；
2. 訂出個人進行實地考察研究的計劃。你可選擇自己**一人完成**全部探究階段(階段 a-e)，或與同學**組成小組**(每組不多於 4 人)，一起完成階段 a-b。如你選擇後者，你亦需獨自完成階段 c-e；
3. 擬定有關(例如：空間、區位、形態及人與環境的相互關係)的個人(最為理想的安排) 題目；
4. 設定探究目標及決定實地考察所採用的**探究方法**；及
5. 識別需要蒐集的資料和數據，以及準備**蒐集數據的工具** (例如：設計問卷)。

## 階段 (b) 數據蒐集

1. 運用不同技巧和工具蒐集實地數據，如觀察、測量及進行調查；
2. 有系統地記錄和組織實地數據；
3. 於實地進行數據蒐集前評估數據蒐集過程中可能遇到的困難；
4. 在蒐集數據期間如遇上困難，應彈性處理及建議另外一些方法
5. 從二手數據中蒐集補充資料。



## 階段 (c) 數據處理、匯報及分析

1. 以恰當的形式處理和演示蒐集得來的數據 (最理想是利用地理信息系統等資訊科技)；
2. 清楚解釋實地考察探究的目標及詳細說明你的研究方法；
3. 選用合適的統計方法(如有需要)；
4. 利用不同製圖技巧製作圖表、草圖或圖像，並與內文及照片加以整合；
5. 檢討、測試和分析所蒐集的數據和資料，以識別當中的含意、形態及/ 或關係。向數據及材料的版權持有人或機構鳴謝。

## 階段 (d) 闡釋探究結果及作出結論

1. 根據探究題目，**驗證和闡釋探究的結果**；
2. 應用地理概念、知識及詞彙；及
3. 憑藉證據、有理據的原因及/或理論的支持而作出**總結、建議  
解決方法 及/或作出決定**。

## 階段 (e) 評鑑

1. 評價整個探究過程及為研究該主題所採用技巧的合適程度提出意見；及
2. 討論該探究的局限性和建議其他可行的取向或延續。

## 2. 全方位學習（LWL）和移動學習概述

# 甚麼是全方位學習？

切身體驗、豐富學習

全方位學習是把學習空間從課室拓展到其他環境的策略。

透過教師靈活地利用多樣化的環境和社區資源，配合時、地、人各方面所組成的學習情境，讓學生獲得一般在課堂上難以體會的經驗



# 全方位學習的目的和意義

## 全人發展、終身學習

全方位學習強調要讓學生在**真切情境**和實際環境中學習。

這些切身體驗能夠令學生更有效地掌握一些單靠課堂學習難以達到的學習目標，例如培養在日常生活中**解決問題的能力**，培育為社會及人類謀福祉的**正面態度**，都需要學生經常接觸不同的人、不同的環境和情況。

全方位學習為學生創造機會，讓他們**從實際體驗中學習**，這有助學生在不斷變化的社會中，實現全人發展的目標和發展終身學習的能力。



# 探究式學習教學

- 由學生為主導的學習模式，老師扮演輔導的角色協助學生建構知識。在學習過程中，學生需要不斷發問及透過蒐集及分析資料去解答問題。
- 於課堂教學中進行探究，讓學生在教師的有效指導下和相互交流的自發反思下，按照教材分析和教師的指示或提問、或所提供的訊息，通過主體參與學習，自主探討解決問題的方式，有效理解學習內容，從而達到自主學習的目的。

# 探究式學習教學

- 「**教師引導、學生主體**」為基本精神，避免學生在好奇心的驅使下從事盲目和低效能的自發探究活動。
- 學生在探究過程中需要**鑑定問題、搜集資料及解決問題**，以代替教師給予「**正確**」答案的做法。
- 探究學習並不強調尋找「**標準**」或「**正確**」答案，而是**為問題尋找適切的解決辦法**，因為有些時候並沒有「**標準**」或「**正確**」的答案。

# 探究學習的基本特點

- 學生**主動參與**，教師**從旁協助**
- 學生通過探究活動**自行發現**，從中**建構出新知識**
- 重視**協作學習**
- 注重**證據**為問題解決的基礎
- 重視學習的**評估**

# 探究式教學類型

## 一.指導式探究

- 主要目的在於教導學生學習，也就是協助學生「學習如何學習」
- 教師可在學生進行探究之前或在探究之中給予指示和引導，再讓學生實際進行探究並自行發現答案之所在，兼顧教師和學生的角色
- 在指導式探究教學中，教師在提出問題、促進反應、組織材料和情境上皆有相當重要的任務，教師可說是整個學習的領導者和組織者

# 探究式教學類型

## 一.指導式探究特徵

- **教師**的角色是班級活動的**領導者**(提出問題、促進反應、組織材料和情境)
- **學生**要對各種事件、資料或材料作反應，並**根據觀察建立某種有意義的關係**。
- **學生**思考的過程是由特殊的觀察到**推論**，教師要鼓勵每位學生相互溝通。

# 探究式教學類型

## 二. 非指導式探究

- 美國科學教育學者卡林及桑德(Carin & Sund, 1985) 認為學生要從事非指導式的探究學習時，必須**自己能夠發掘問題**，提出其所欲探討的問題。
- **學生是主動**的、積極的，教師只是居於協助的地位，不給予任何的指導，在整個探究過程中**完全由學生自行決定所需蒐集的資料**，並加以整理，最後自行獲得答案，解決問題。
- 皮亞傑(J. Piaget)認為並不是每一個小學階段的兒童皆有完全自由探究和發現的能力，所以在進行非指導式探究時，要注意的是**並非所有的學生皆適合**使用非指導式探究的教學法



# 探究式教學類型

## 二.非指導式探究特徵

- 教師**在整個過程中只控制材料和提出一些簡單的問題。
- 學生**從觀察探究中獲得**有意義的關係或型態**。
- 教師**鼓勵學生提供自己的**推論**與其他人**分享**。

# 探究式教學類型比較

	指導式探究教學	非指導式探究教學
教學重點	教師在學生進行探究式之前或在探究式之中給予 <b>指示和引導</b> ，再讓學生實際進行探究並自行發現答案所在	探究式過程中 <b>完全由學生自行去決定</b> 所需蒐集的資料，並加以整理，最後自行獲得答案解決問題
教師角色	<b>教師</b> 是班級活動的 <b>領導者</b> ，教學活動中鼓勵每位學生相互溝通	<b>教師</b> 是居於 <b>協助</b> 的地位，不給予任何指導
學生角色	對各種事件、資料或材料作 <b>反應</b> ，並根據觀察去建立某種有意義的關係。	<b>積極主動</b> 的去決定蒐集資料、整理資料和獲得答案解決問題。

# 探究式學習教學類型

探究式學習**四種類型** (引自 Bell, Smetana, & Binns, 2005, p.32)

- **驗證性**的探究 (Confirmation inquiry)
- **結構化**的探究 (Structured inquiry)
- **引導性**的探究 (Guided inquiry)
- **開放性**的探究 (Open inquiry)



- 引導式與開放式探究的差異在於**教師**是否主動提供學生可研究的**問題**讓學生從中選取感興趣的部份
- 結構化探究型態的差異在於**教師**是否主動提供研究問題的**解決方式**
- 階層愈低代表**學生學習的自主性愈低**，而**教師介入的程度愈高**；階層愈高代表教師介入程度低，且學生愈能夠自行完成整個探究的學習工作

# 探究式學習教學類型

**Figure 1.**

The four levels of inquiry and the information given to the student in each one.

Inquiry Level	Question	Procedure	Solution
1—Confirmation Inquiry <i>Students confirm a principle through an activity when the results are known in advance.</i>	✓	✓	✓
2—Structured Inquiry <i>Students investigate a teacher-presented question through a prescribed procedure.</i>	✓	✓	
3—Guided Inquiry <i>Students investigate a teacher-presented question using student designed/ selected procedures.</i>	✓		
4—Open Inquiry <i>Students investigate questions that are student formulated through student designed/selected procedures.</i>			

# 探究式學習教學類型

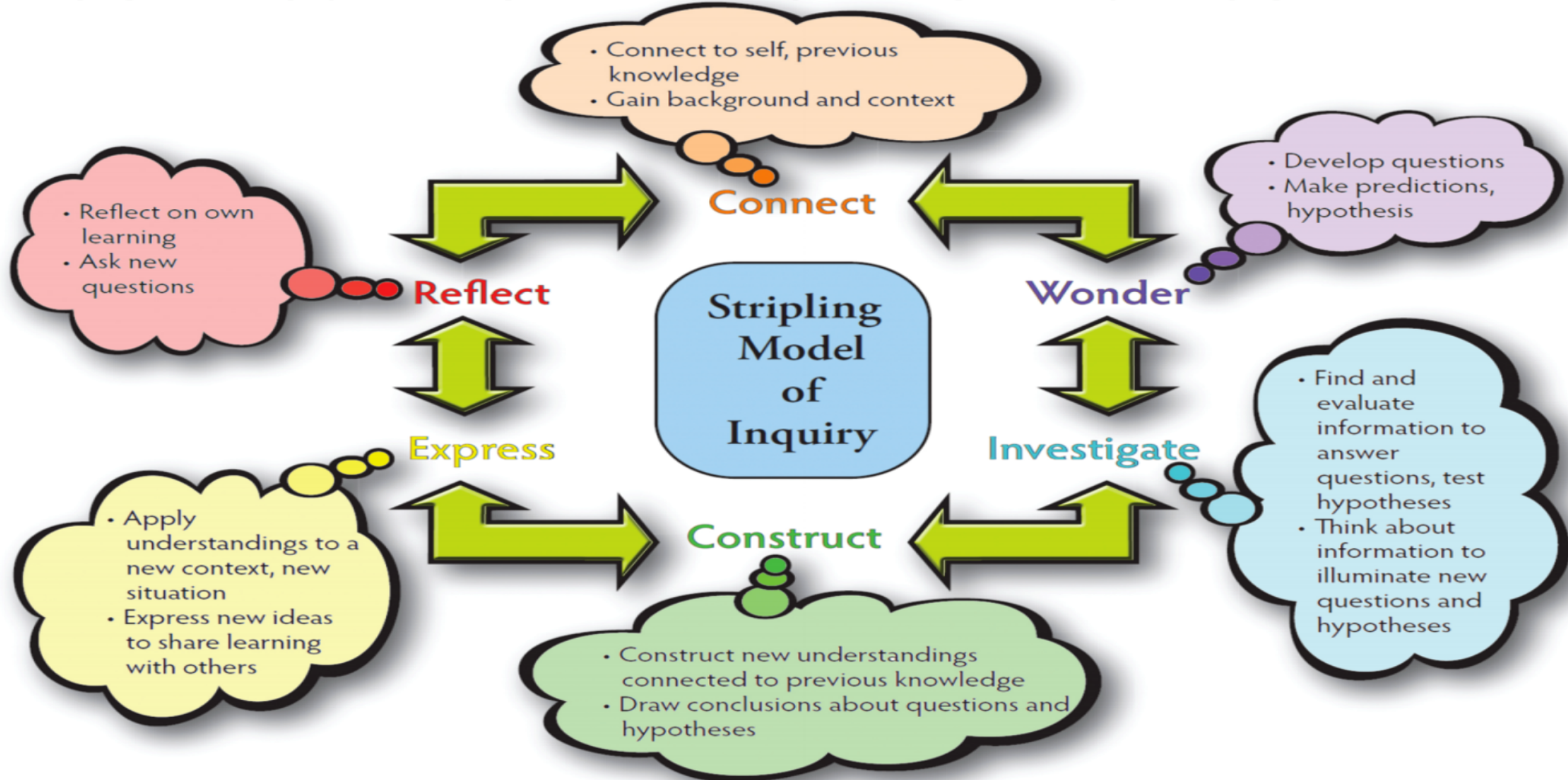
表1、探究活動的四個層次（引自 Bell et al., 2005, p.32）

探究活動的四個層次	提供探究 問題	提供解決 方法	提供正確 答案
階層 0 驗證性的探究（Confirmation inquiry）	v	v	v
階層 1 結構化的探究（Structured inquiry）	v	v	
階層 2 引導性的探究（Guided inquiry）	v		
階層 3 開放性的探究（Open inquiry）			

# 探究式學習教學 常見模式及實施

## Stripling Model of Inquiry Connect, wonder, investigate, express and reflect

*The Stripling Model of Inquiry is used throughout the Library of Congress' Teaching with Primary Sources program.*





## Stripling Model of Inquiry

### 1. Wonder

- Develop **questions**
- Make predictions, hypothesis

### 2. Investigate

- Find & evaluate **information** to answer questions, test hypotheses
- Think about information to **illuminate new questions**

### 3. Construct

- Construct **new understanding** connected to previous knowledge
- **Draw conclusions** about questions and hypotheses

### 4. Express

- **Apply** understanding to new content, New situations
- Express new ideas **to share learning with others**

### 5. Reflect

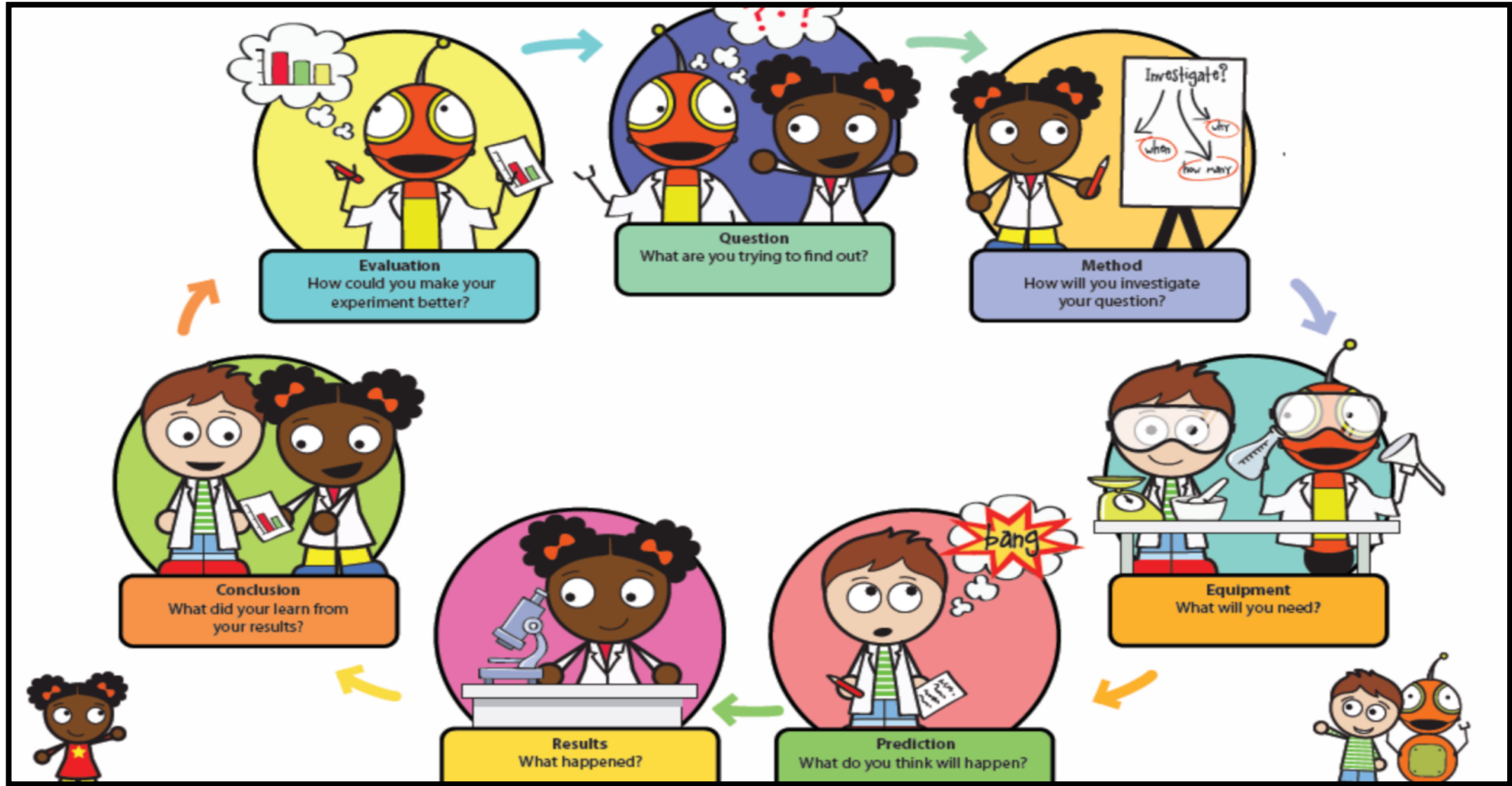
- Reflect on own learning
- **Ask new questions**

### 6. Connect

- Connect to self, previous knowledge
- **Gain background and context**
- Observe, experience

# 探究式學習教學 常見模式及實施

## Scientific enquiry 科學探究



# 探究式學習教學 常見模式及實施

## Teaching Inquiry with Primary Sources



### TEACHING with PRIMARY SOURCES

- ➔ [TPS Program Home](#)
- ➔ [About the Program](#)
- ➔ [TPS Regional Program](#)
- ➔ [TPS Journal](#)
- ➔ [Contact Us](#)

#### Related Resources at the Library

- ➔ [Teacher's Page](#)
- ➔ [American Memory](#)
- ➔ [America's Library](#)
- ➔ [American Folklife Center](#)
- ➔ [Prints and Photographs](#)
- ➔ [Veterans' History Project](#)
- ➔ [Poetry Page](#)
- ➔ [Wise Guide](#)

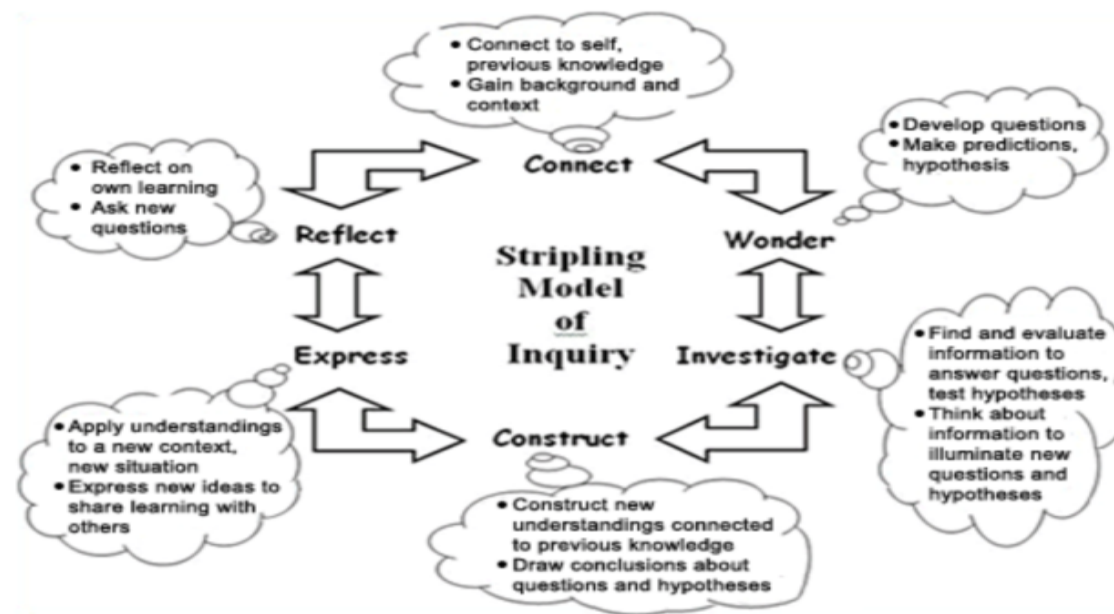
[About TPS Quarterly](#) | [Quarterly Main](#) | [Feature Article](#) | [Research and Current Thinking](#) | [Teacher Spotlight](#) | [Learning Activity \(Elementary\)](#) | [Learning Activity \(Secondary\)](#) | [TPS Quarterly Archive](#)

### Teaching Inquiry with Primary Sources

#### Why is inquiry important for student learning?

Inquiry is a process of active learning that is driven by questioning and critical thinking. The understandings that students develop through inquiry are deeper and longer lasting than any pre-packaged knowledge delivered by teachers to students.

Inquiry-based learning follows a process that progresses through phases, but is recursive and reflective throughout. The six phases and their thought processes are detailed in the following diagram.



Stripling Model of Inquiry

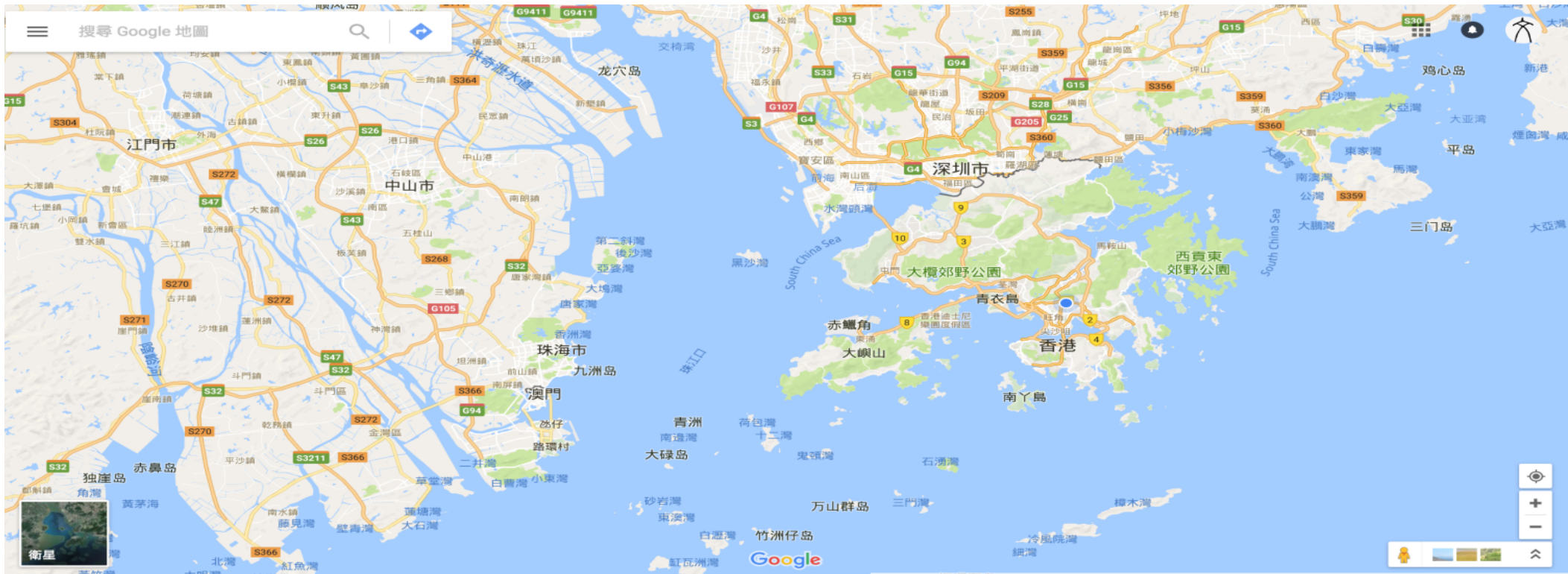
Teaching Inquiry with Primary Sources [www.loc.gov/teachers/tps/quarterly/inquiry\\_learning/article.html](http://www.loc.gov/teachers/tps/quarterly/inquiry_learning/article.html)



### 3. 配合 CUHK CLST EduVenture 和 Environmental Systems Research Institute (ESRI) Survey123 學習系統的探究式學習 (IBL)

# 配合移動學習系統的探究式學習 (IBL)

## Google Maps



<http://maps.google.com/>

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The Chinese University of Hong Kong





# 配合移動學習系統的探究式學習 (IBL)

## Google Earth



<https://www.google.com/earth/>

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





# 配合移動學習系統的探究式學習（IBL）

## Google Earth

The screenshot shows the Google Earth website interface. At the top, the Google logo is followed by the Chinese characters "地球" (Earth). To the right, there is a language dropdown menu set to "English". Below the header, the main heading is "Climate change in Google Earth". Underneath this, a paragraph describes the purpose of the site: "Explore the potential impacts of climate change on our planet Earth and learn about solutions for adaptation and mitigation, in the context of the United Nation's Climate Conference (COP15) in Copenhagen. With Google Earth you can view climate change scenarios, interact with narrated tours, investigate deforestation, and even dive into the depths of the oceans." Below the text, there is a vertical list of five tour options, each with a small portrait of the speaker and a "View tour in 3D" button. The tours are: "Confronting Climate Change with Al Gore", "Projecting Future Climate Change with Steve Schneider", "Speaking for the Forests with Dr. Jane Goodall", "Climate Action in California with Arnold Schwarzenegger", and "Protecting the Arctic Ocean with Ted Danson & Oceana". To the right of this list is a large black rectangular area. Below the list, there is a link to "View the questions in the live CNN/YouTube debate". At the bottom right, there is a logo for "RAISE YOUR VOICE CHANGE CLIMATE CHANGE" with a bar chart graphic. A green banner at the bottom of the page contains the URL "https://archive.google.com/landing/cop15/".

Google 地球

Language: English

### Climate change in Google Earth

Explore the potential impacts of climate change on our planet Earth and learn about solutions for adaptation and mitigation, in the context of the [United Nation's Climate Conference \(COP15\)](#) in Copenhagen. With [Google Earth](#) you can view climate change scenarios, interact with narrated tours, investigate deforestation, and even dive into the depths of the oceans.

- Confronting Climate Change**  
with Al Gore  
[View tour in 3D](#)
- Projecting Future Climate Change**  
with Steve Schneider
- Speaking for the Forests**  
with Dr. Jane Goodall
- Climate Action in California**  
with Arnold Schwarzenegger
- Protecting the Arctic Ocean**  
with Ted Danson & Oceana

[View the questions in the live CNN/YouTube debate](#)

Ask

**RAISE YOUR VOICE**  
CHANGE CLIMATE CHANGE

<https://archive.google.com/landing/cop15/>

# 配合移動學習系統的探究式學習 (IBL)

## CUHK EduVenture System



CUHK  
香港中文大學

CLST 學習科學  
與科技中心  
Centre for Learning Sciences and Technologies

EduVenture®

電郵

密碼

登入

[忘記密碼](#)

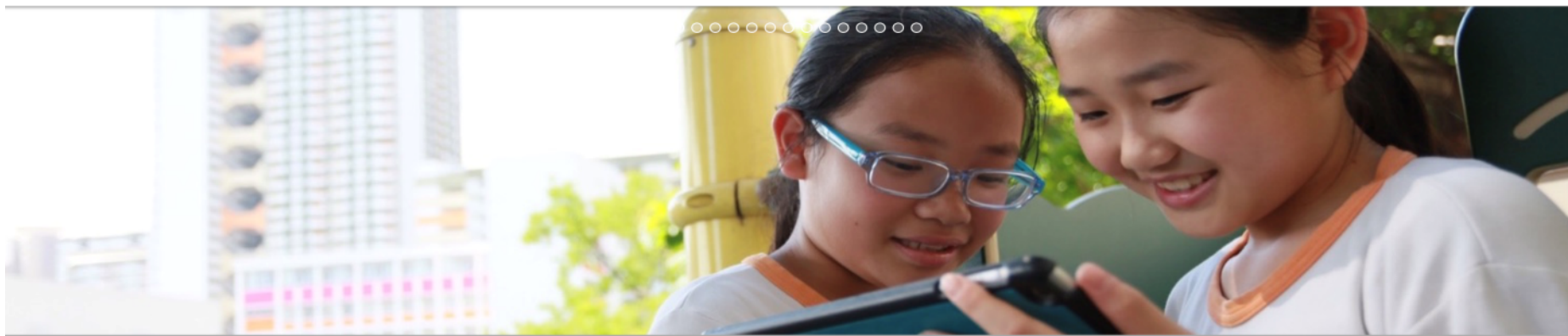
[首頁](#)

[開發團隊](#)

[系統學與教](#) ▾

[EduVenture 網誌](#)

[聯絡資料](#)



EduVenture® Composer

由於網絡技術問題，近日連接到EduVenture伺服器曾出現斷線或無法編輯等問題，我們已盡力及已完成收復工作。EduVenture系統已正常運作。但伺服器早前的問題可能導致2016年11月至12月其間的題目選項出現不完整，而需要重新輸入選項。主要受影響題型為MC裡的選，表格及概念圖的內容；（\*題目本身不受影響）。在未來會致力更新系統，令服務更穩定可靠；這次為各位帶來不便，我們十分抱歉。若有任何疑問或需要技術支援，請電郵至clst@fed.cuhk.edu.hk

<http://ev-cuhk.net/>

### EduVenture®戶外教材設計比賽 得獎作品

各得獎作品現已於 EduVenture® X應用內開放供所有用戶下載。

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



# CUHK EduVenture System

The Centre for Learning Sciences and Technologies (CLST), The Chinese University of Hong Kong (CUHK) launched the **EduVenture®** learning system, which has been well received by students and teachers. CLST has recently developed **EduVenture® VR (Virtual Reality)**, a sub-system of EduVenture®.

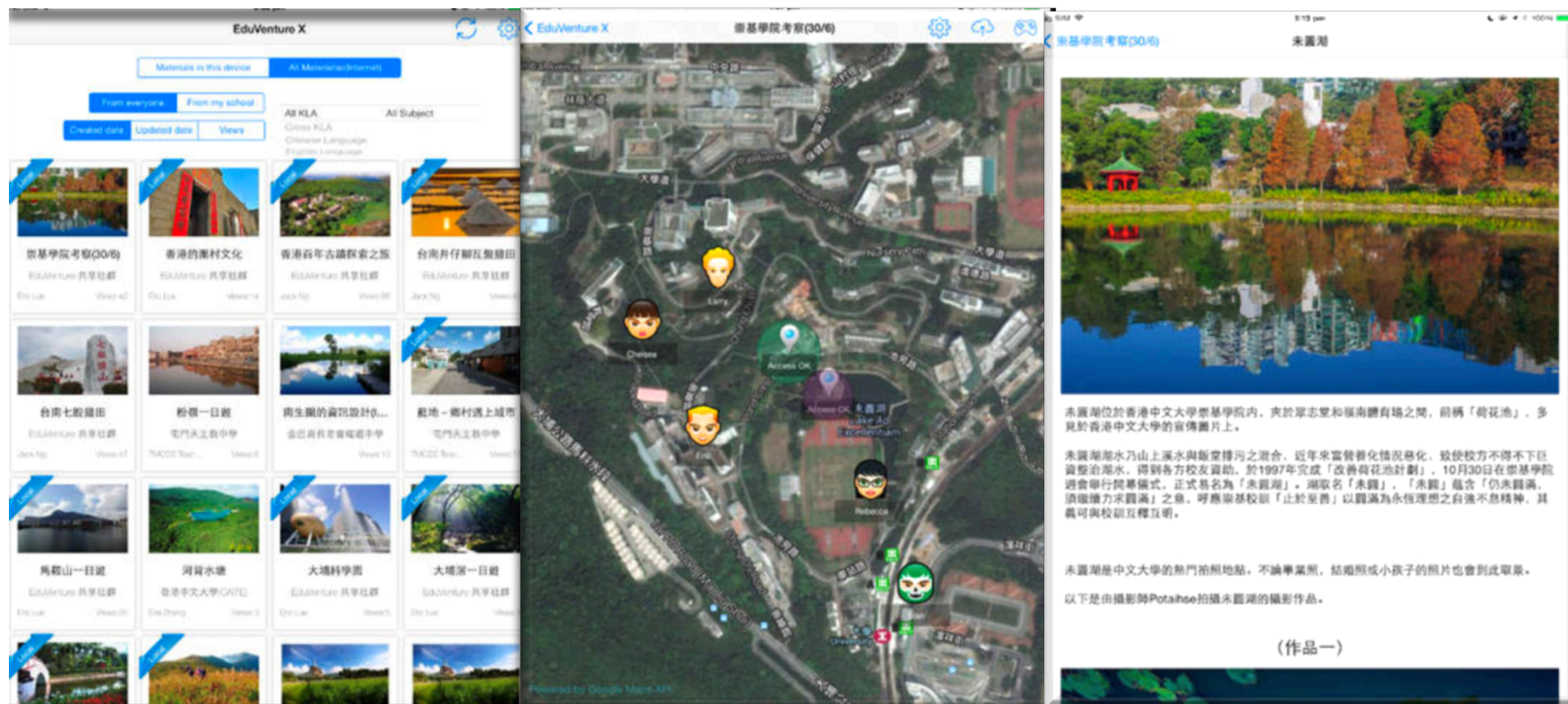


[首頁](#) [開發團隊](#) [系統學與教](#) [EduVenture 網誌](#) [聯絡資料](#)





# CUHK EduVenture System



# CUHK EduVenture System

EduVenture® Composer



**Teacher**

EduVenture® eXplorer



下載 iPad 版

下載 iPhone 版

**Student**

EduVenture® Retriever



需要登入才能使用這功能

**Student  
+  
Teacher**

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



# CUHK EduVenture System

**iPad**



**iPhone**





# CUHK EduVenture System

No SIM 3:08 pm EduVenture X 100%

Materials in this device

All Materials(Internet)

From everyone

From my school

Created date

Updated date

Views

All KLA

All Subject

Cross KLA

Chinese Language

English Language

Local



崇基學院考察(30/6)

EduVenture 共享社群

Eric Luk

Views:42

Local



香港的圍村文化

EduVenture 共享社群

Eric Luk

Views:14

Local



香港百年古蹟探索之旅

EduVenture 共享社群

Jack Ng

Views:86

Local



台南井仔腳瓦盤鹽田

EduVenture 共享社群

Jack Ng

Views:42



台南七股鹽田

EduVenture 共享社群

Jack Ng

Views:47



粉嶺一日遊

屯門天主教中學

TMCSS Teac...

Views:6



南生圍的資訊設計(I...

金巴崙長老會耀道中學

Views:10

Local



藍地 - 鄉村遇上城市

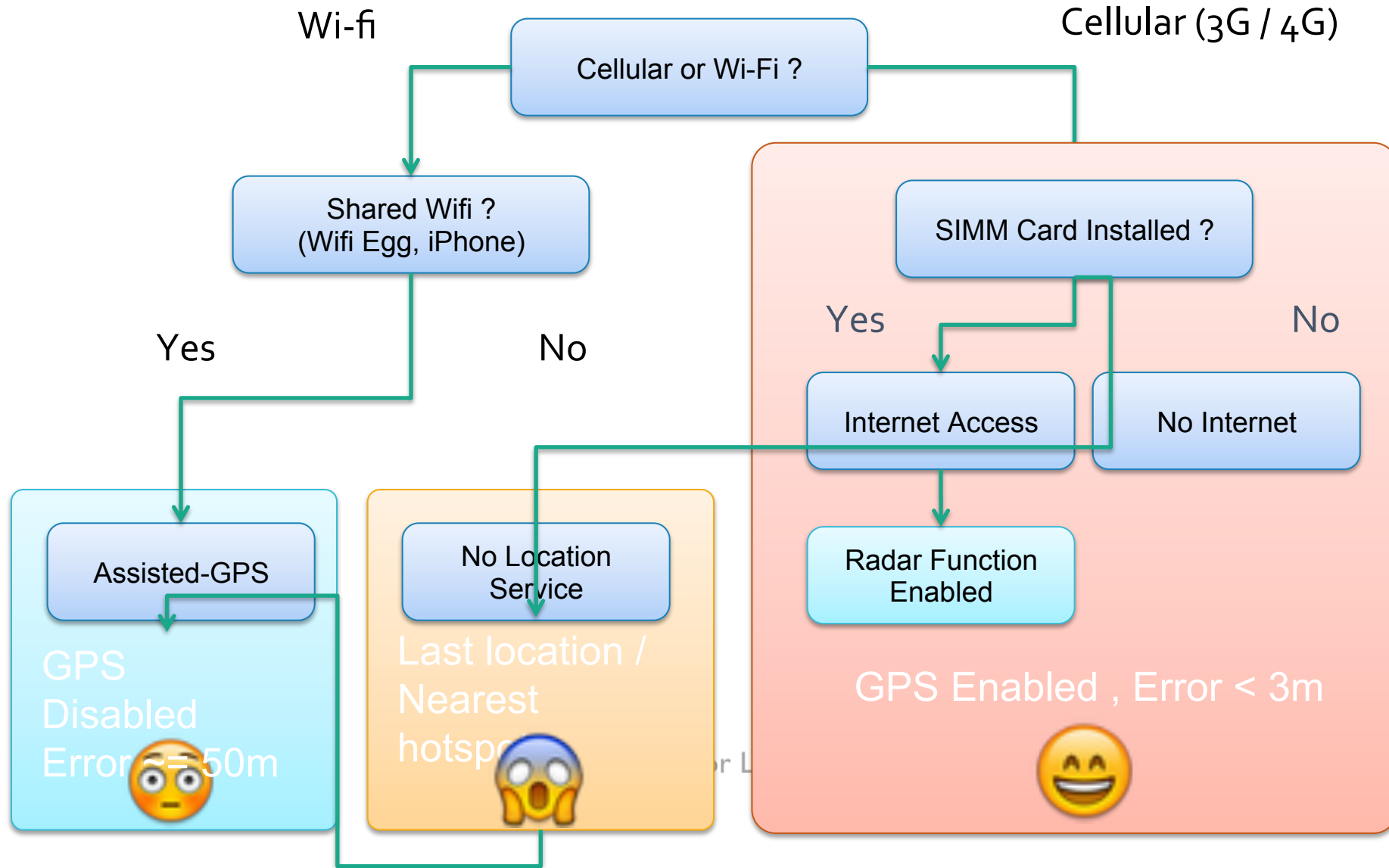
屯門天主教中學

TMCSS Teac...

Views:77



# CUHK EduVenture System



# CUHK EduVenture System

## Composer

- Create locales
- Define maps
- Create Hotspot
- Create Questions
- Save and view on iOS
- Account management

EduVenture® Composer



Teacher

# CUHK EduVenture System

The Portal: <http://ev-cuhk.net>

**CUHK**  
香港中文大學

**CLST** 學習科學  
與科技中心  
Centre for Learning Sciences and Technologies

EduVenture®

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[忘記密碼](#)

首頁 開發團隊 系統學與教 ▾ EduVenture 網誌 聯絡資料



**EduVenture® 短片教室**

**EduVenture® Composer**  






# CUHK EduVenture System

## Create a New Map

1. The Name
2. A good picture to represent the region
3. KLA + Subject
4. Ready to publish or not
5. Private / Public

The screenshot shows the 'Create New Map' (創建新考察) form in the CUHK EduVenture System. The form is divided into several sections:

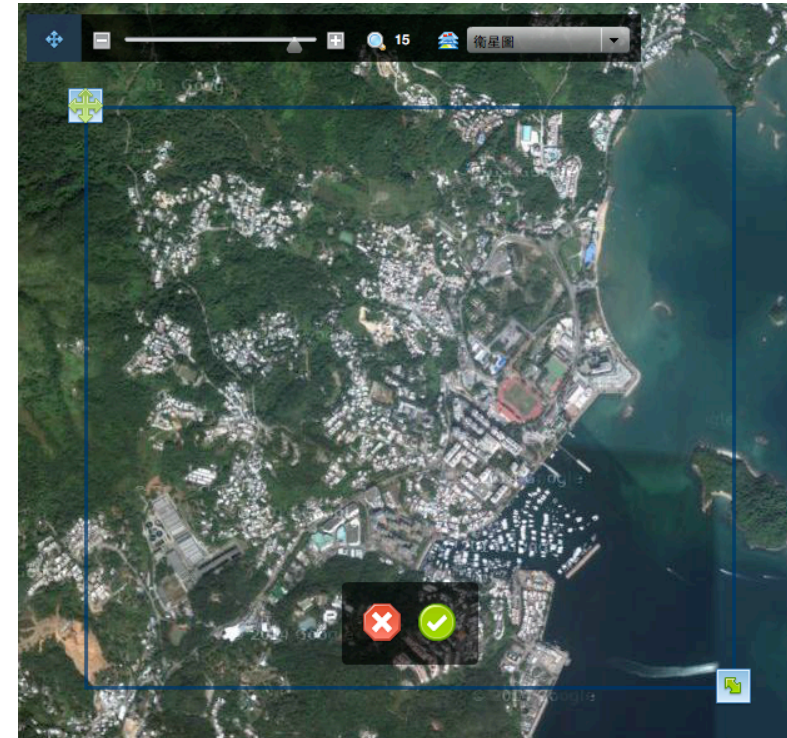
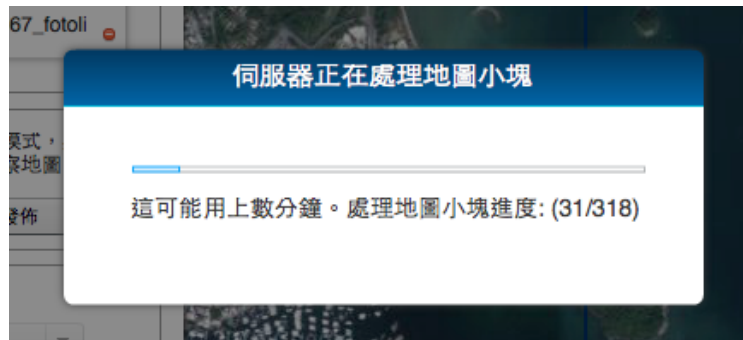
- 考察名稱 (Map Name):** A text input field containing '西貢話當年'.
- 考察描述 (Map Description):** A larger text input field.
- 考察用語言 (Map Language):** A dropdown menu set to '繁體中文'.
- 是否共享 (Share?):** A dropdown menu set to '限本校使用'.
- 代表顏色 (Representative Color):** A color selection button showing a blue square.
- 考察封面圖片 (必須上載) (Map Cover Image (Must Upload)):** A section with an '上傳本機檔案' (Upload Local File) button and a '圖片: 未有檔案' (Image: No file) status.
- 學習領域 (KLA) (Learning Area):** A dropdown menu set to '請選擇'.
- 學科 (Subject):** A dropdown menu.
- Buttons:** At the bottom, there are two large buttons: a red 'X' (Cancel) and a green checkmark (Save/Confirm).



# CUHK EduVenture System

## Define the Region

1. Do it within zoom level 15-16
2. Include **MORE** not LESS
3. Wait for 1-2 minutes





# CUHK EduVenture System

## Create and Put down a Hotspot



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# CUHK EduVenture System

## Hotspot Settings

1. A proper name
2. Radius (A tree – Football field)
3. Larger instead of smaller
4. Give it a color

The screenshot shows the '編輯熱點' (Edit Hotspot) interface. At the top, there's a purple header with the title. Below it, a form contains several fields: '名稱' (Name) with a text input field containing '新熱點'; '已定好位置' (Location set) with a green checkmark and two map icons; '顏色' (Color) with a green color picker; '半徑' (Radius) with a slider; '熱點類別' (Hotspot Category) with a dropdown menu set to '正常顯示'; and '熱點內容' (Hotspot Content) with a large text area and a green plus icon. At the bottom, there's a green checkmark icon.

# CUHK EduVenture System

## Hotspot Component

1. 12 Types of Component
2. Unlimited
3. Try to keep them < 15
4. Combinations are possible



# CUHK EduVenture System

## Simple Description(Text + One Picture)

### 編輯內容



#### 圖文描述

內容名稱

分類 沒分類 ▼

難度 ★ ★ ★ ★ ★

#### 描述圖片



圖片: klc02.jpg

#### 文字描述(可用HTML語法)

Sai Kung Town (Chinese: 西貢市) or simply Sai Kung (Chinese: 西貢) is a town on Sai Kung Peninsula, facing the Sai Kung Hoi (Inner Port Shelter).|

# CUHK EduVenture System

## Voice Over

### 編輯內容

 聲音導航  
內容名稱

分類   
難度     

#### 聲音描述

選擇加入聲音方式  
   
聲音: 未有檔案

#### 文字描述(可用HTML語法)

# CUHK EduVenture System

## Concept Map





# CUHK EduVenture System

## Photo taking

編輯內容

 拍照題

內容名稱

分類 

沒分類

難度 

★☆☆☆☆

拍攝題描述

Please take a photo of the temple



# CUHK EduVenture System

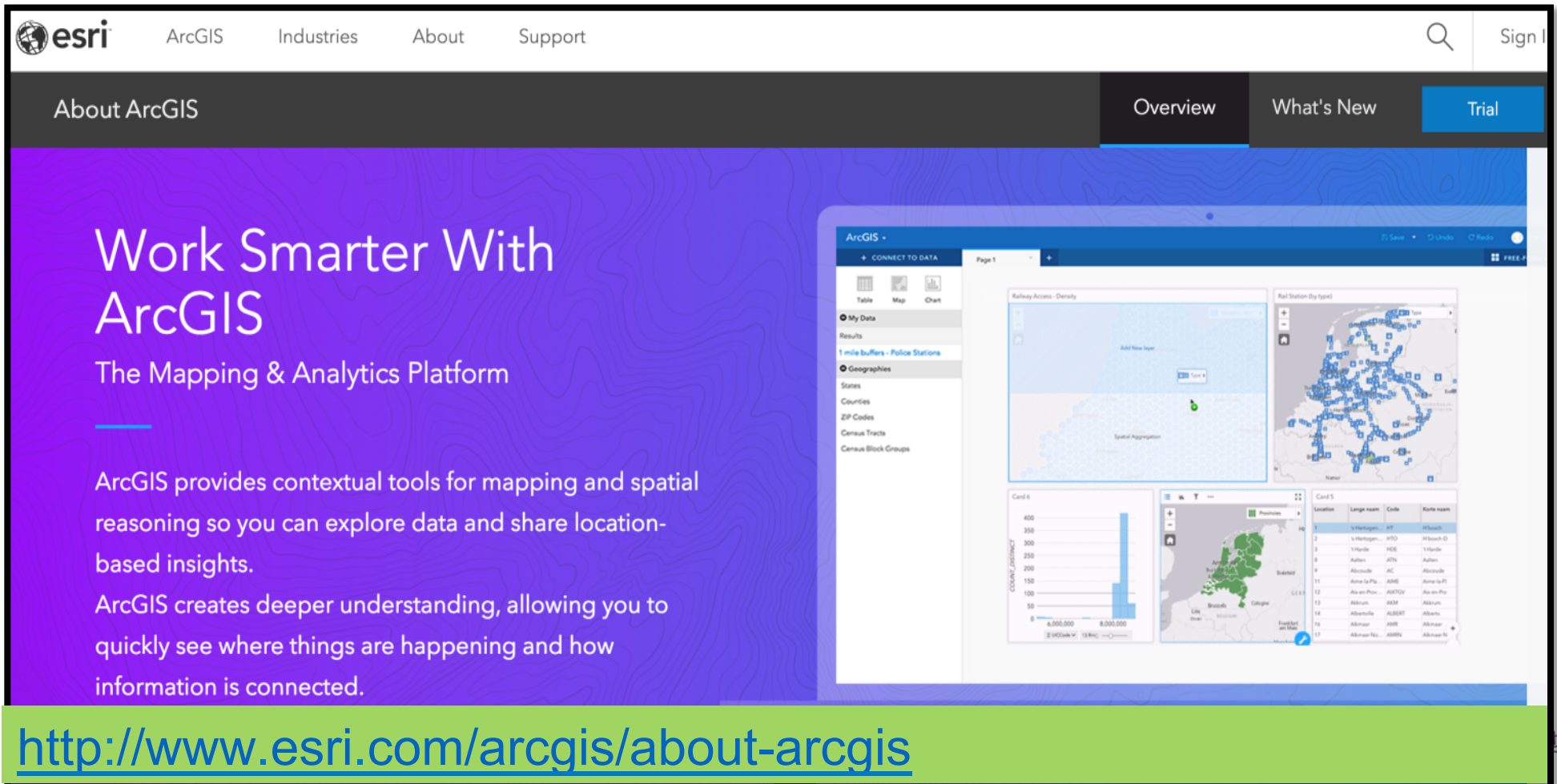
## School LOCALE Management Explained

	LOCALE NOT Published	LOCALE Published	LOCALE NOT Shared (Private)  + Published	LOCALE Shared (Public)  + Published
Composer (Teacher Account of the Same School)	Yes	Yes	Yes	Yes
iPad of my school (with school key entered)	No	Yes	Yes	Yes
iPad of other schools	No	depends on share setting	No	Yes



# 配合移動學習系統的探究式學習（IBL）

## ArcGIS (indoor)



esri ArcGIS Industries About Support

About ArcGIS Overview What's New Trial

## Work Smarter With ArcGIS

### The Mapping & Analytics Platform

ArcGIS provides contextual tools for mapping and spatial reasoning so you can explore data and share location-based insights.

ArcGIS creates deeper understanding, allowing you to quickly see where things are happening and how information is connected.

CONNECT TO DATA Page 1

Table Map Chart

My Data

Results

1 mile buffers - Police Stations

Geographies

States

Countries

ZIP Codes

Census Tracts

Census Block Groups

Railway Access - Density


Rail Station (by type)

Card 6

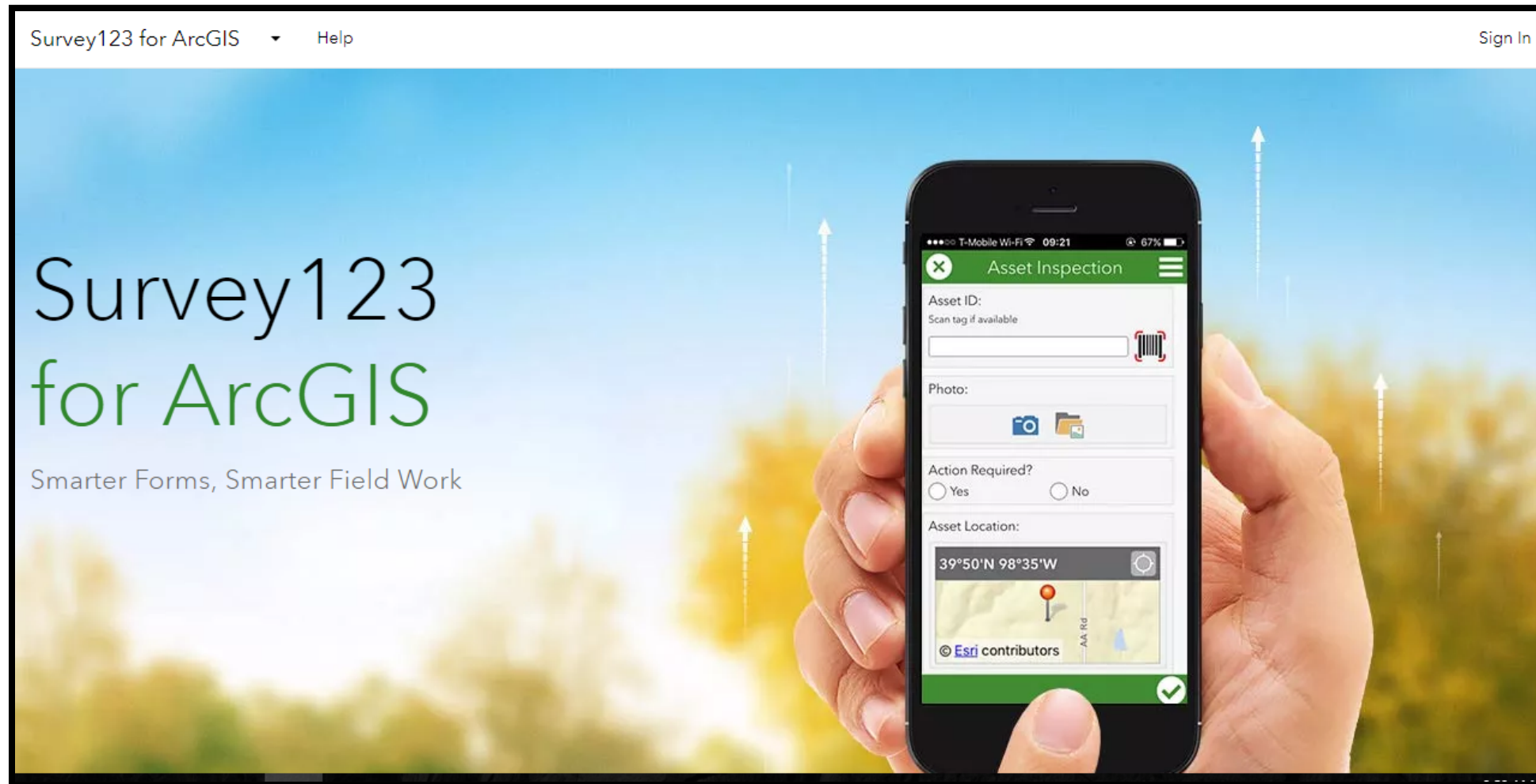
Card 5

Location	Large mean	Code	Route mean
1	1.0	01	01
2	1.0	02	02
3	1.0	03	03
4	1.0	04	04
5	1.0	05	05
6	1.0	06	06
7	1.0	07	07
8	1.0	08	08
9	1.0	09	09
10	1.0	10	10
11	1.0	11	11
12	1.0	12	12
13	1.0	13	13
14	1.0	14	14
15	1.0	15	15
16	1.0	16	16
17	1.0	17	17

<http://www.esri.com/arcgis/about-arcgis>



# 配合移動學習系統的探究式學習 (IBL)



## Get Started with Survey123 for ArcGIS Guideline

Task :

微氣候：環境與溫度的關係 with Survey123 for ArcGIS

Objective

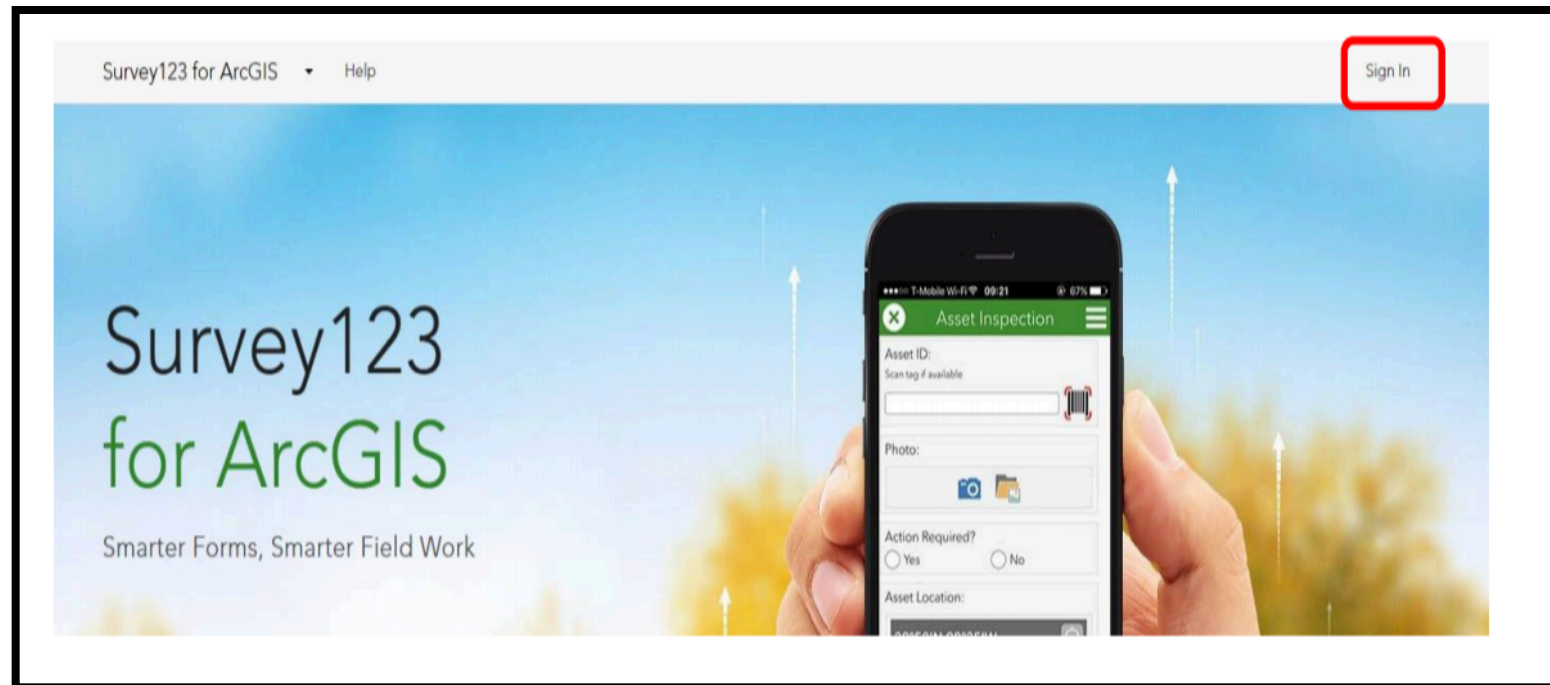
- To better understand 環境與溫度的關係
- Collect essential information in the field with Survey123 for ArcGIS
- Basic **data analysis** with your data



# Get Started with Survey123 for ArcGIS Guideline

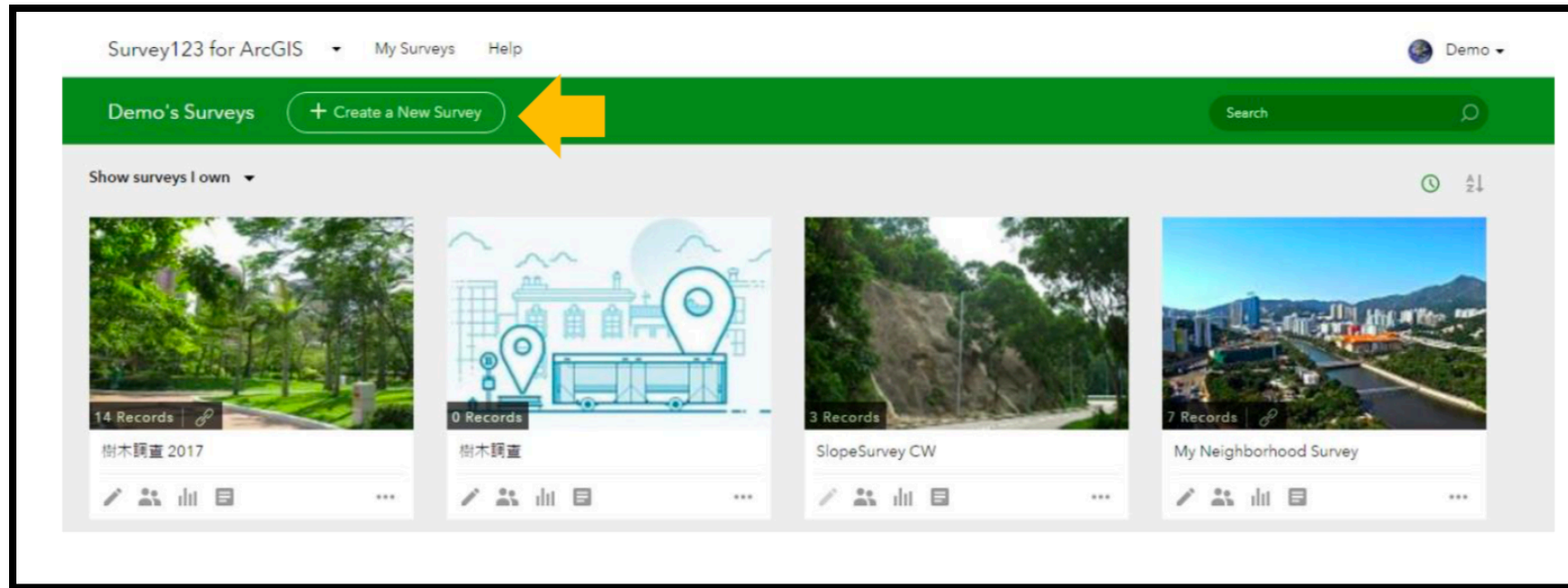
## Preparing Your Survey

1. Browse to <http://survey123.arcgis.com> , and sign in with your ArcGIS organizational account.



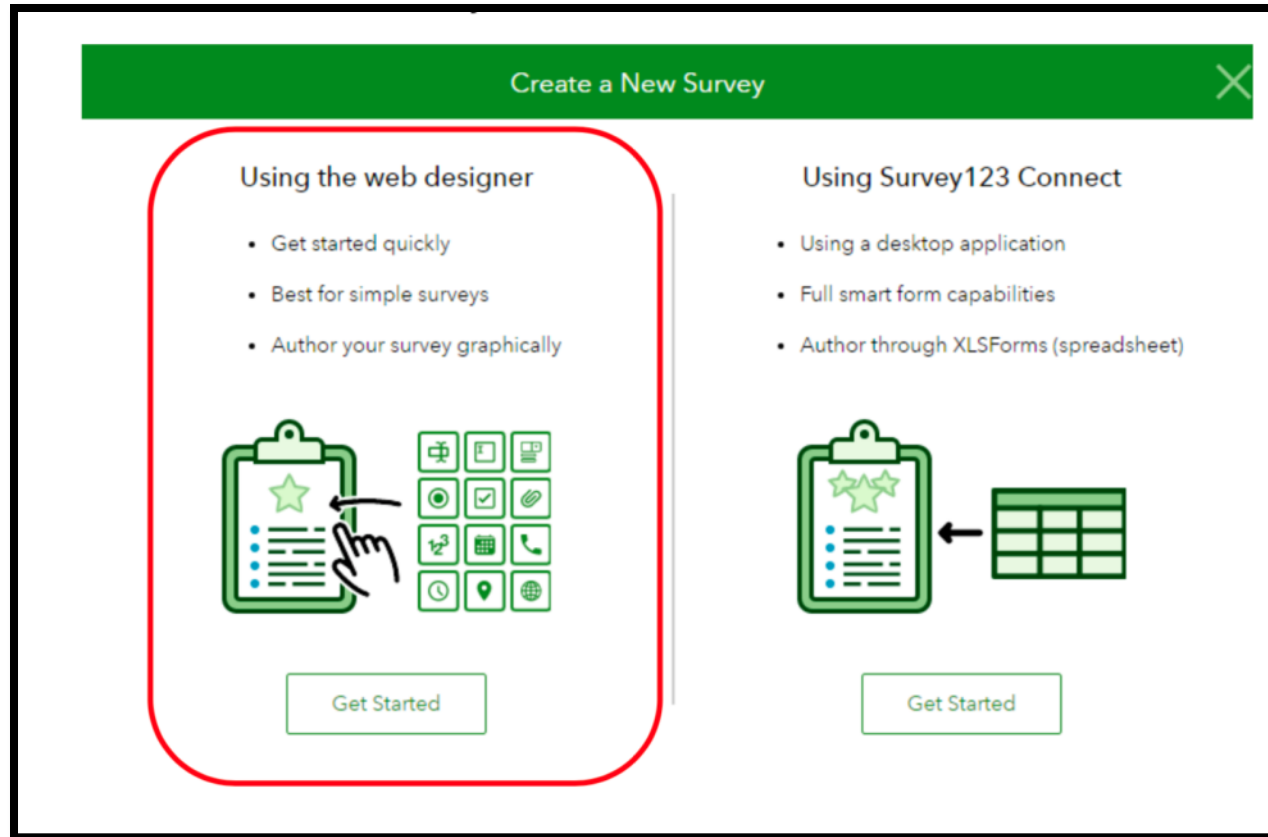
# Get Started with Survey123 for ArcGIS Guideline

## 2. Click Create New Survey



# Get Started with Survey123 for ArcGIS Guideline

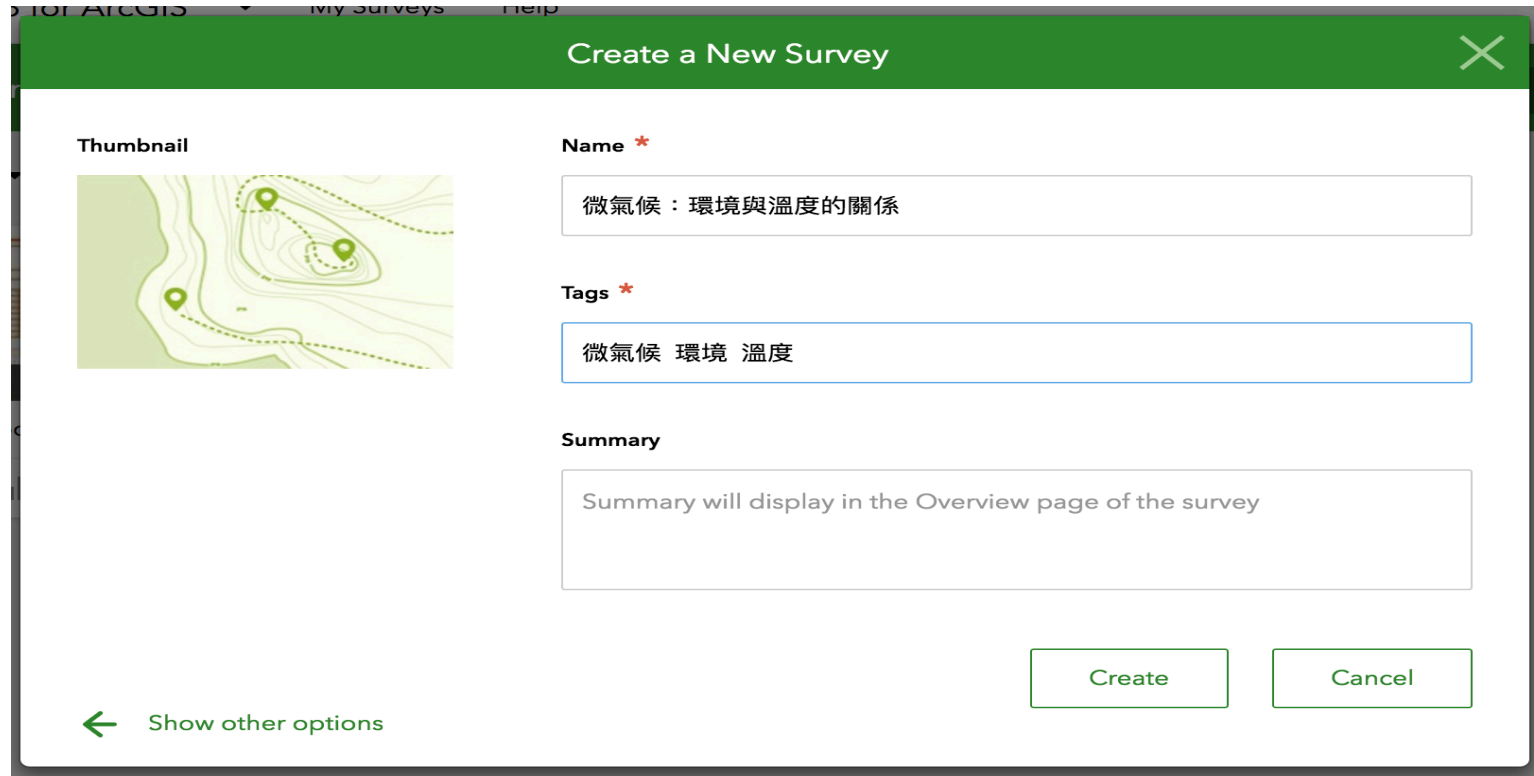
## 3. Click From Survey123 Web



## Get Started with Survey123 for ArcGIS Guideline

4. Create a **form** and **name** 微氣候：環境與溫度的關係, enter **tags** CLST (a minimum of one tag is required) and a **description**.

You can also upload a picture as a **Thumbnail** of your survey by clicking the photo on the left. Once finish, click **Create**.



Thumbnail

Name \*

微氣候：環境與溫度的關係

Tags \*

微氣候 環境 溫度

Summary

Summary will display in the Overview page of the survey

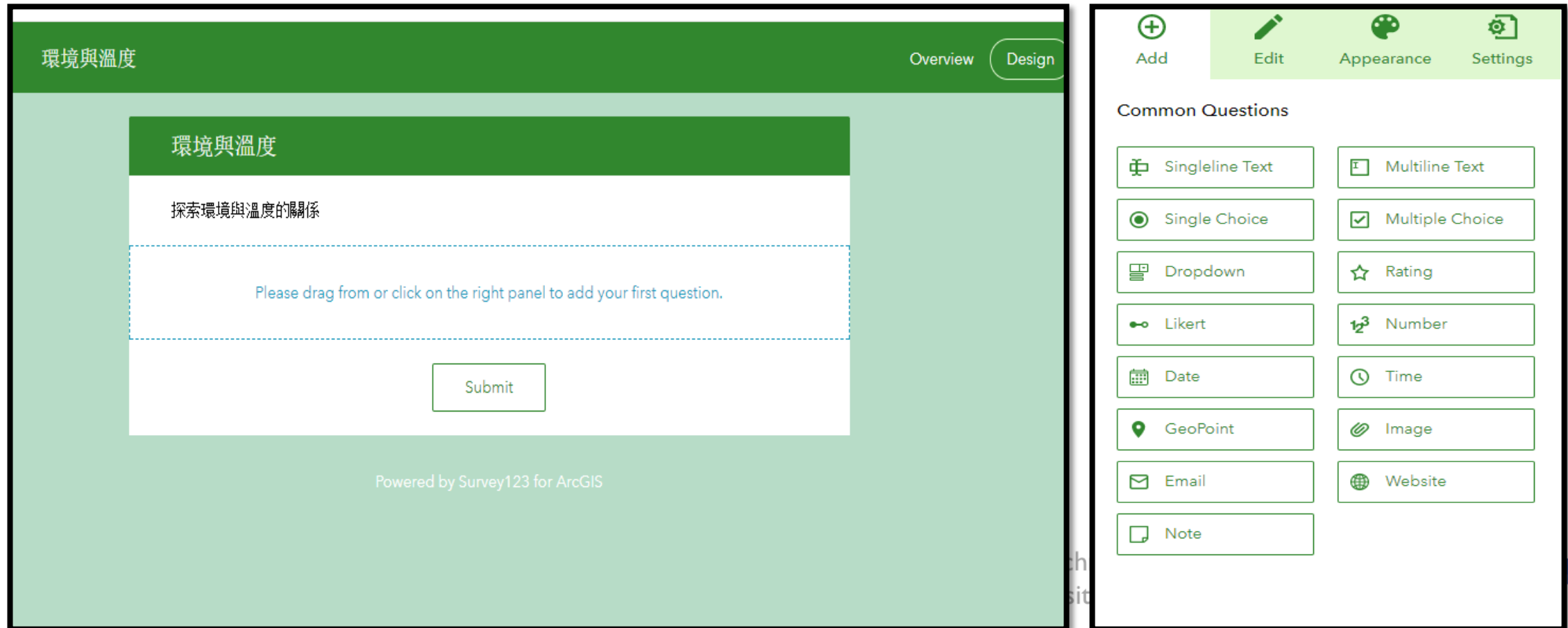
Create Cancel

Show other options



## Get Started with Survey123 for ArcGIS Guideline

5. The Survey123 website displays an empty survey, with list of available **questions type** on the right.



The screenshot displays the Survey123 for ArcGIS interface. The main survey form on the left is titled "環境與溫度" (Environment and Temperature) and contains the subtitle "探索環境與溫度的關係" (Explore the relationship between environment and temperature). A dashed box indicates where to add a question, with the text "Please drag from or click on the right panel to add your first question." Below this is a "Submit" button. The right panel, titled "Common Questions", lists various question types that can be added to the survey:

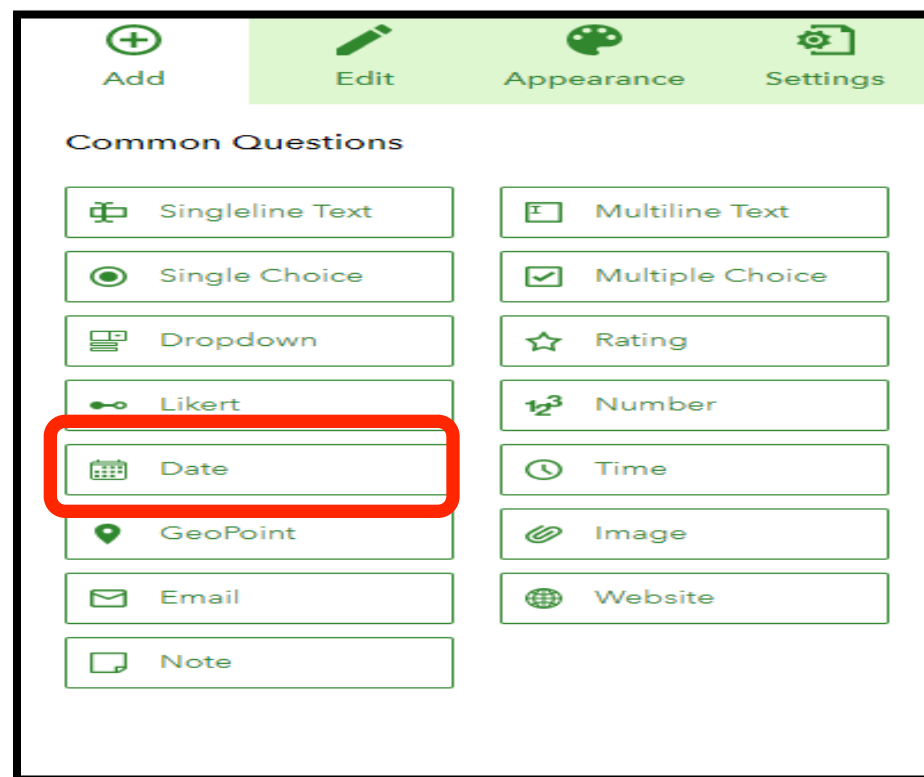
- Singleline Text
- Multiline Text
- Single Choice
- Multiple Choice
- Dropdown
- Rating
- Likert
- Number
- Date
- Time
- GeoPoint
- Image
- Email
- Website
- Note



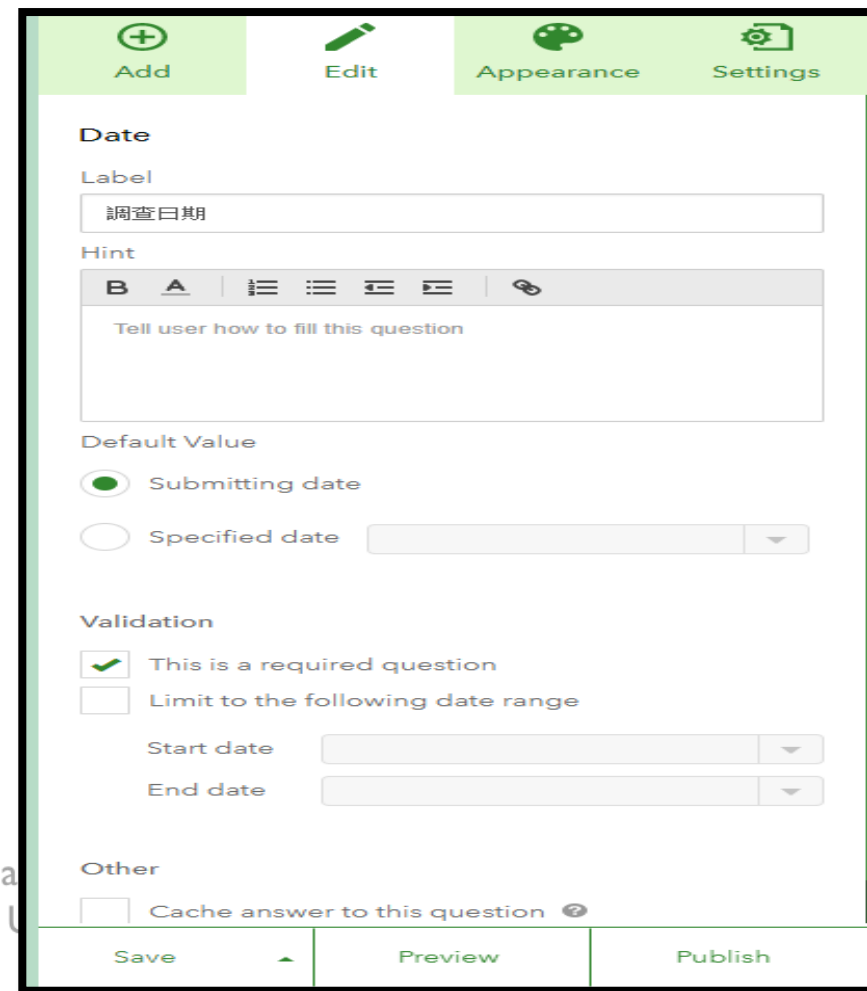
## Suggested Questions to Be Surveyed

### Question 1: Date of Survey

- For the first question, you want to know the **date** of data collection. Click the Date button from the question list and drag it to the form.



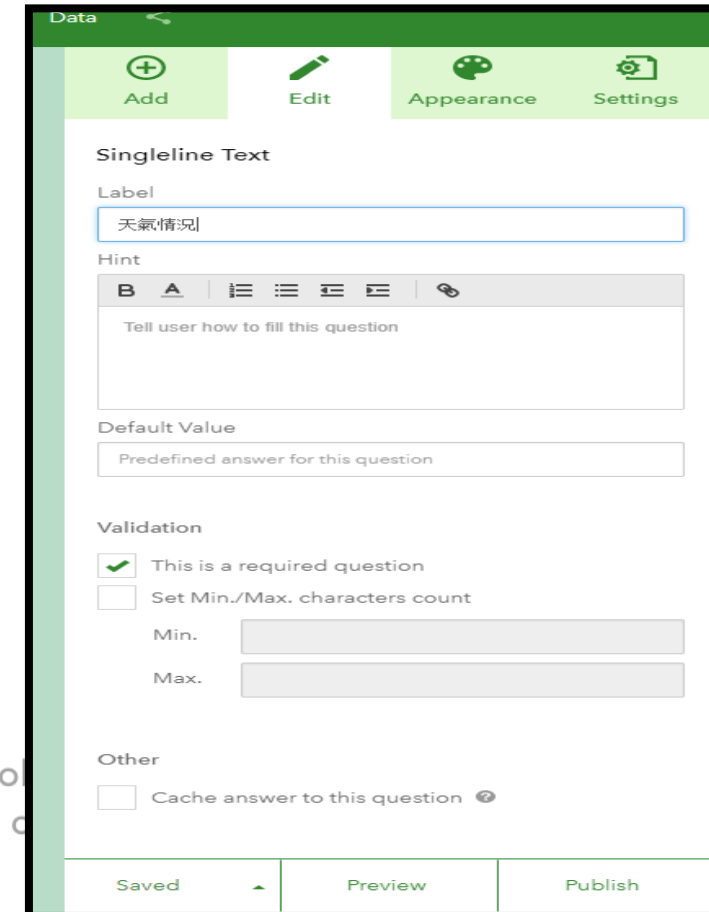
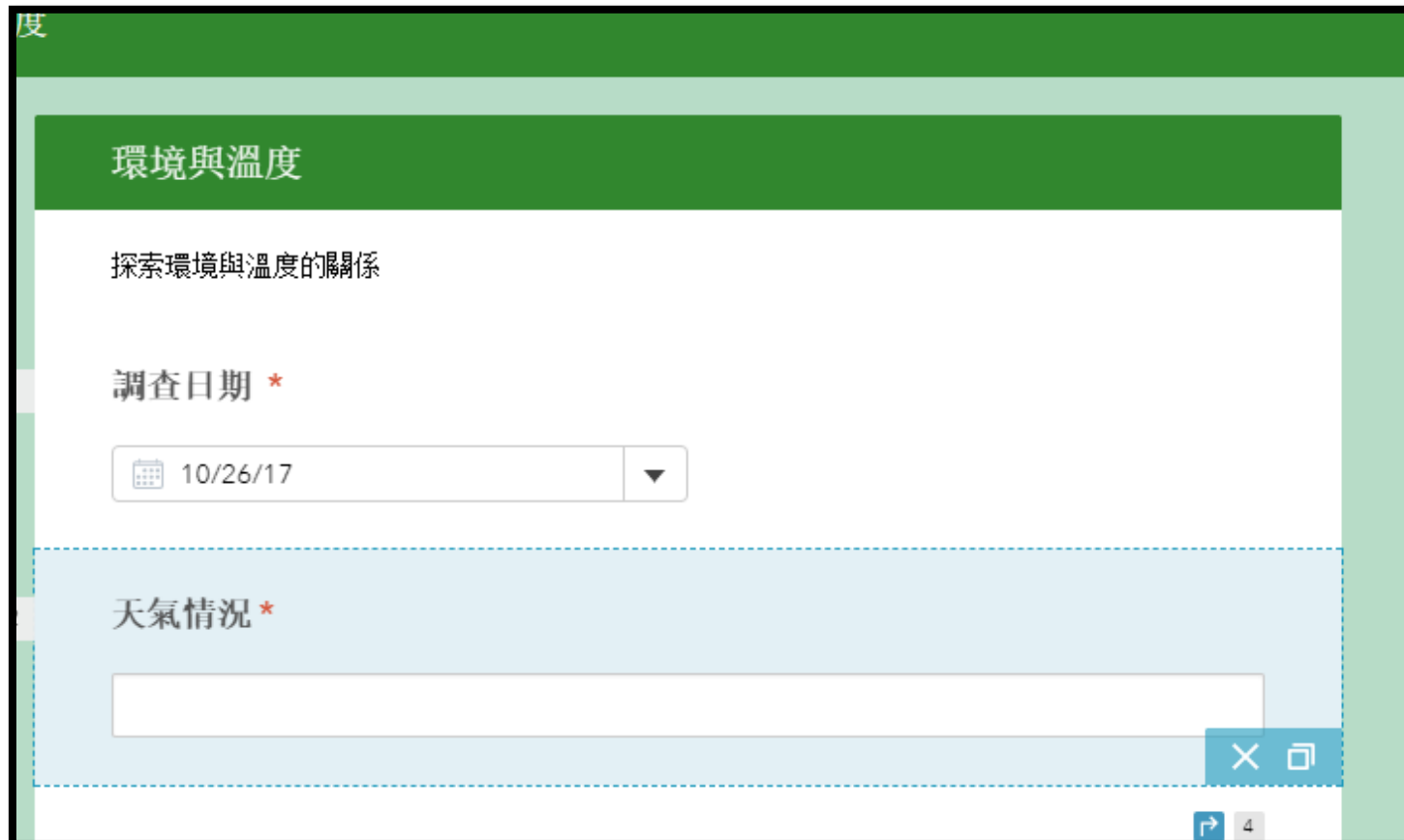
- Click the newly placed question to open the **Edit panel**, where you can enter a **suitable label** for the collection date.
- Now enter the following information:
  - Label: 考察日期
  - Default Value: Select Submitting date
  - Validation: Select “This is a required question”



## Question 2: Short Answer (Name)

The student can enter the 天氣情況.

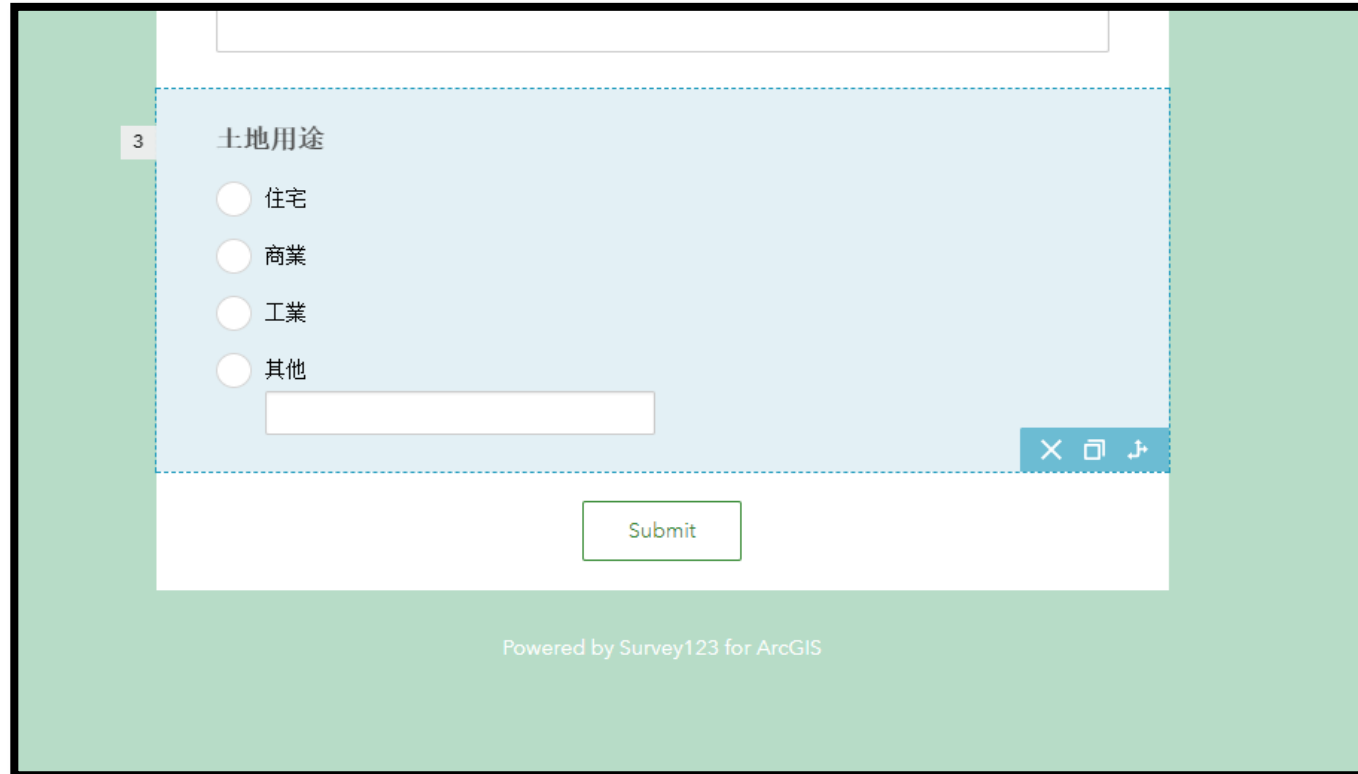
- Click the Add button on the right panel and **select Singleline Text**.
- Similar with the steps above in Question 1, click on the question box to **edit the information** of the question.



## Question 3: Multiple Choice (Type of Shop)

The student is able to select the 土地利用.

- Select **Single Choice** from the Add panel.
- Click on the question box to edit the information of the question and add the **choices** that fit for your study area.'
- 住宅 商業 工業 其他



3 土地利用

☐ 住宅

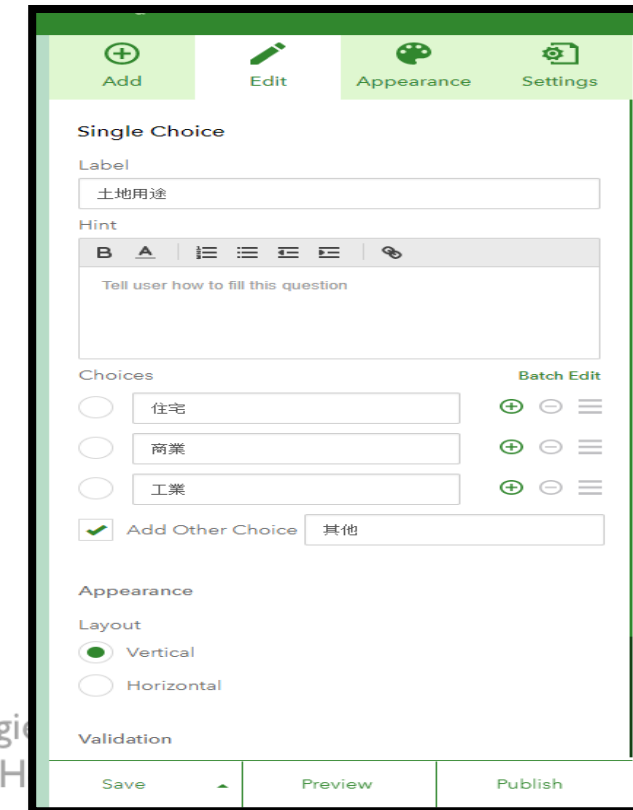
☐ 商業

☐ 工業

☐ 其他

Submit

Powered by Survey123 for ArcGIS



Single Choice

Label  
土地利用

Hint  
Tell user how to fill this question

Choices

	Choices	Batch Edit
<input type="radio"/>	住宅	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	商業	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="radio"/>	工業	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	Add Other Choice	<input type="checkbox"/> 其他

Appearance

Layout

☒ Vertical

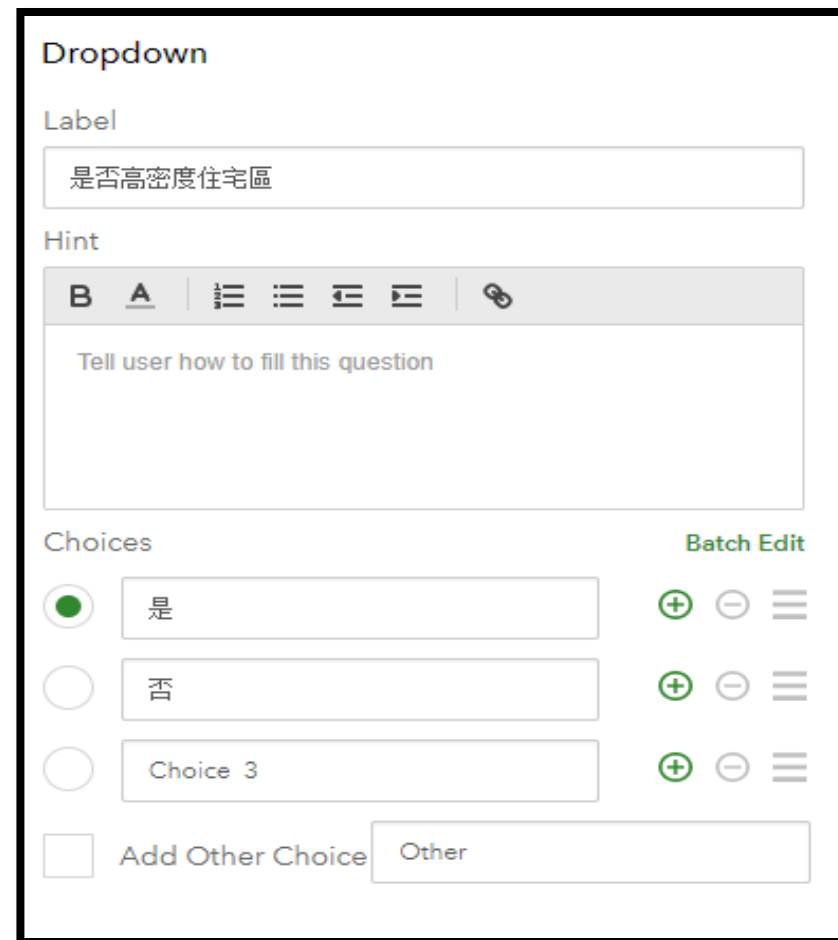
☐ Horizontal

Validation

Save Preview Publish

## Question 4: Drop Down Menu

- 是否高密度住宅區？
- Now, select **Dropdown** from the Add panel.
- If you want to set the **default answer** to your question, click the green button next to your answer box (Pointed with the Red arrow)
- If you wish to add / remove **additional option**, click the “+” or “-” for each row.



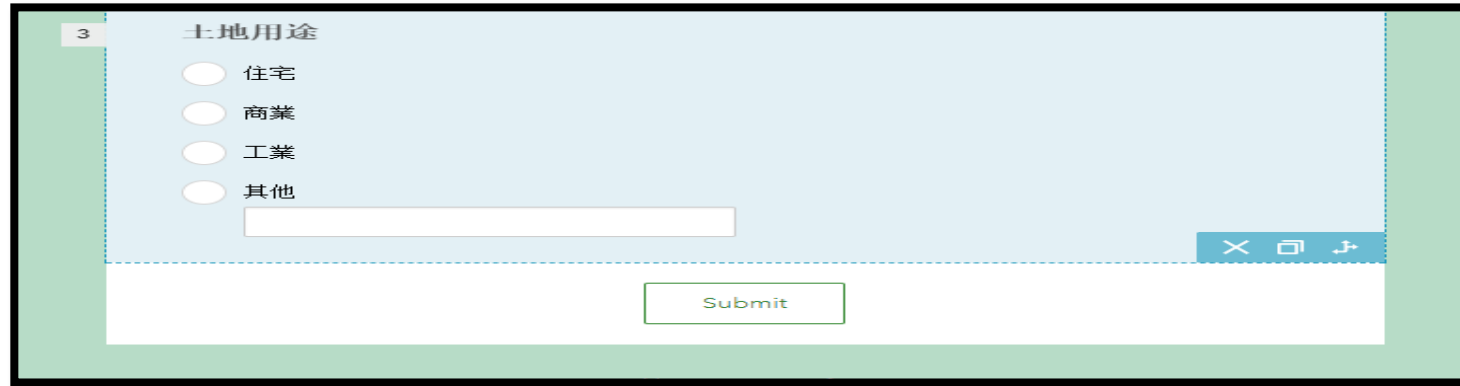
The screenshot shows the configuration interface for a 'Dropdown' question in ArcGIS Survey123. The interface includes the following sections:

- Label:** A text box containing the question '是否高密度住宅區'.
- Hint:** A text box with a placeholder 'Tell user how to fill this question'. Above it is a toolbar with icons for bold (B), italic (A), bulleted list, numbered list, decrease indent, increase indent, and a link icon.
- Choices:** A list of options for the dropdown menu. Each option consists of a radio button, a text box, and a set of control icons (a green '+' button, a grey '-' button, and a grey menu icon). The first option is '是' (Yes) with its radio button selected. The second option is '否' (No). The third option is 'Choice 3'. Below the list is an 'Add Other Choice' checkbox and an 'Other' text box.
- Batch Edit:** A green link text located to the right of the choices list.



### Question 4A : if ... then ...

- In Survey123 for ArcGIS, it **supports responsive question** based on your answer.
- Then, click the question box for Question 4 and click the **Set Rule** button on the lower right corner of the box.



3 土地用途

☐ 住宅

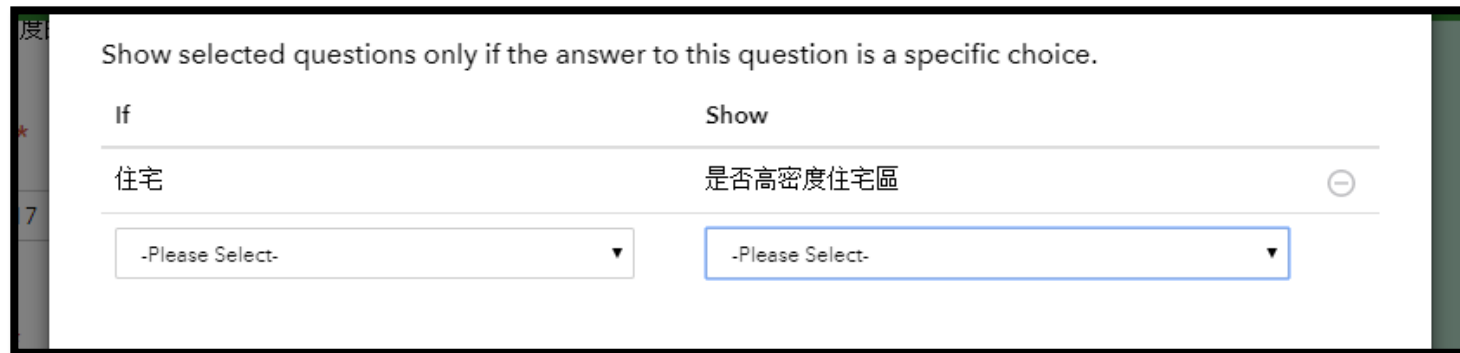
☐ 商業

☐ 工業

☐ 其他

Submit

Then the **Set Rule** pop-up will appear. Now under the **IF** dropdown, select “住宅”. Then in the SHOW dropdown, select “是否高密度住宅區”.



Show selected questions only if the answer to this question is a specific choice.

If	Show
住宅	是否高密度住宅區
<input type="text" value="-Please Select-"/>	<input type="text" value="-Please Select-"/>

## Question 5: GeoPoint

Add

Edit

Appearance

Settings

GeoPoint

Label

考察地點

Hint

B A  $\frac{1}{2}$  ≡ ≡ ≡ ≡ 🔗

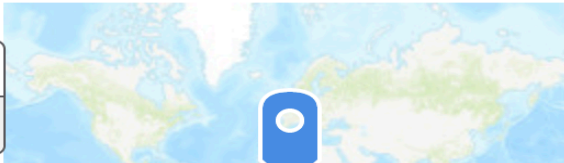
Tell user how to fill this question

Default Map

Topographic

Home Location

+  
—



Save

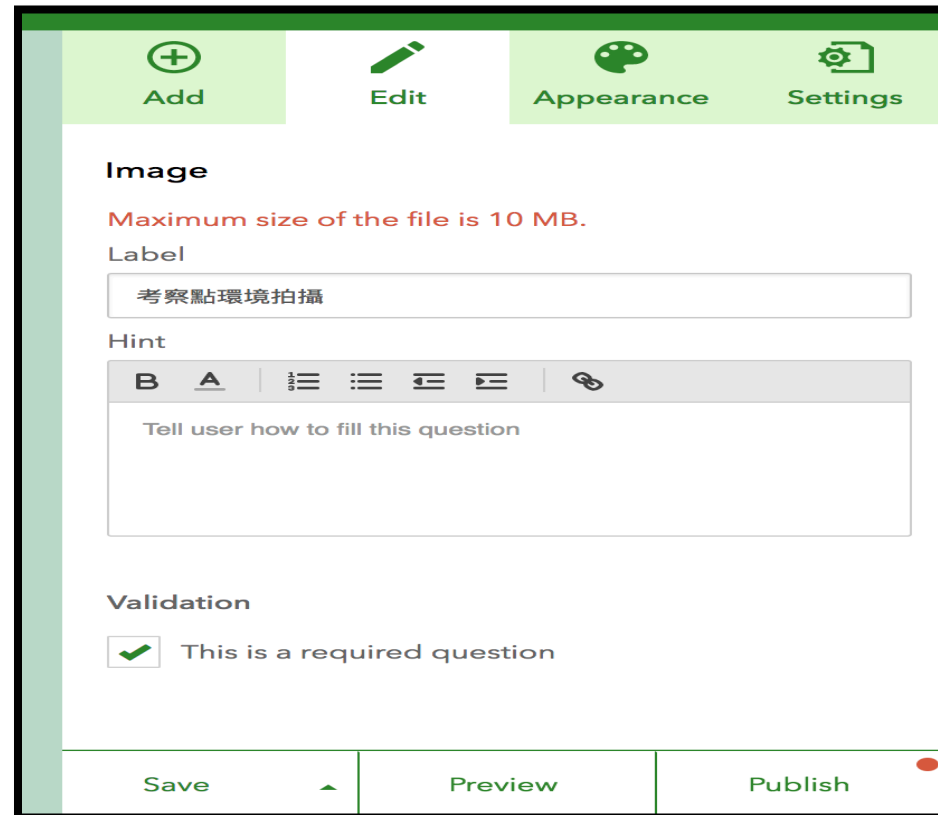
Preview

Publish



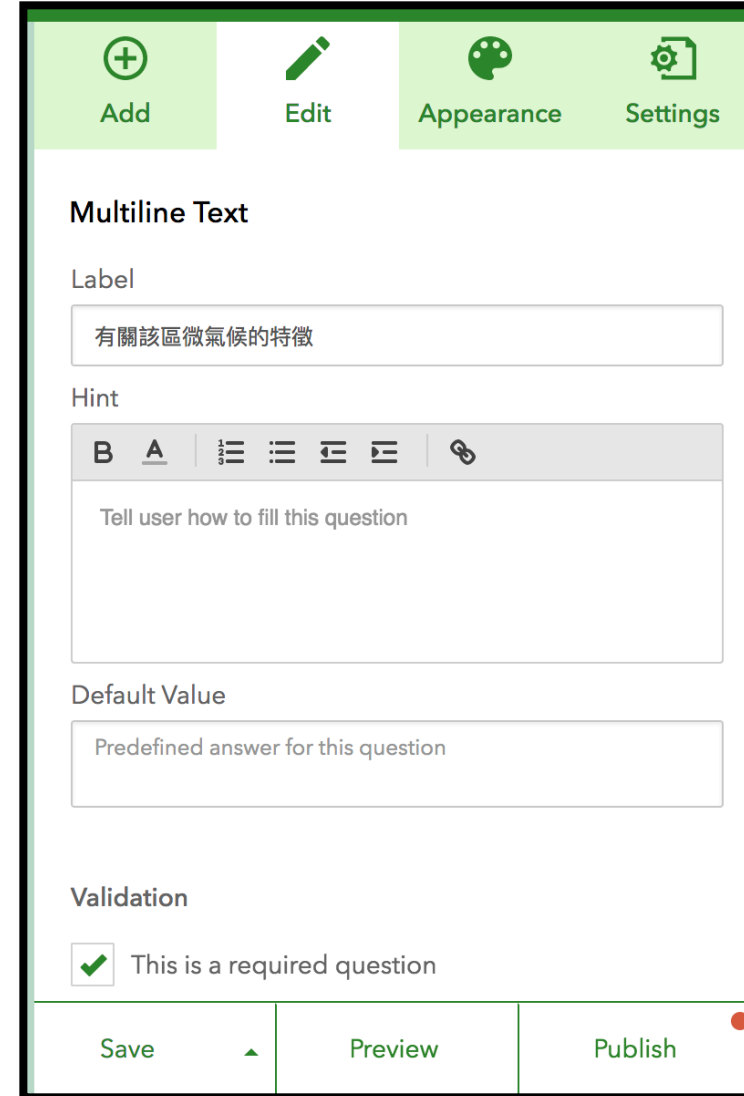
## Question 6: Photo Answer

- You can provide an option for the student to **upload a photo** that less than 10MB for a survey record. Click Image from the
- Add panel and fill in the information about the question.

A screenshot of the Esri Survey123 interface for configuring a question. The top navigation bar has four tabs: 'Add' (selected), 'Edit', 'Appearance', and 'Settings'. The main content area is titled 'Image' and includes a red warning message: 'Maximum size of the file is 10 MB.' Below this, there is a 'Label' field with the text '考察點環境拍攝' and a 'Hint' field with the text 'Tell user how to fill this question'. The 'Hint' field has a rich text editor toolbar with icons for bold, italic, bulleted list, numbered list, decrease indent, increase indent, and link. At the bottom, there is a 'Validation' section with a checked checkbox and the text 'This is a required question'. The bottom navigation bar has three buttons: 'Save', 'Preview', and 'Publish'.

## Question 7: Long Answer (有關該區微氣候的特徵)

- In the last question, you can ask the students to write a few key points or sentences about 該區微氣候的特徵
- Please select **Multiline Text** and insert it into the survey.
- Optional item: you can set the **minimum and maximum** characters count in the edit panel on the right.

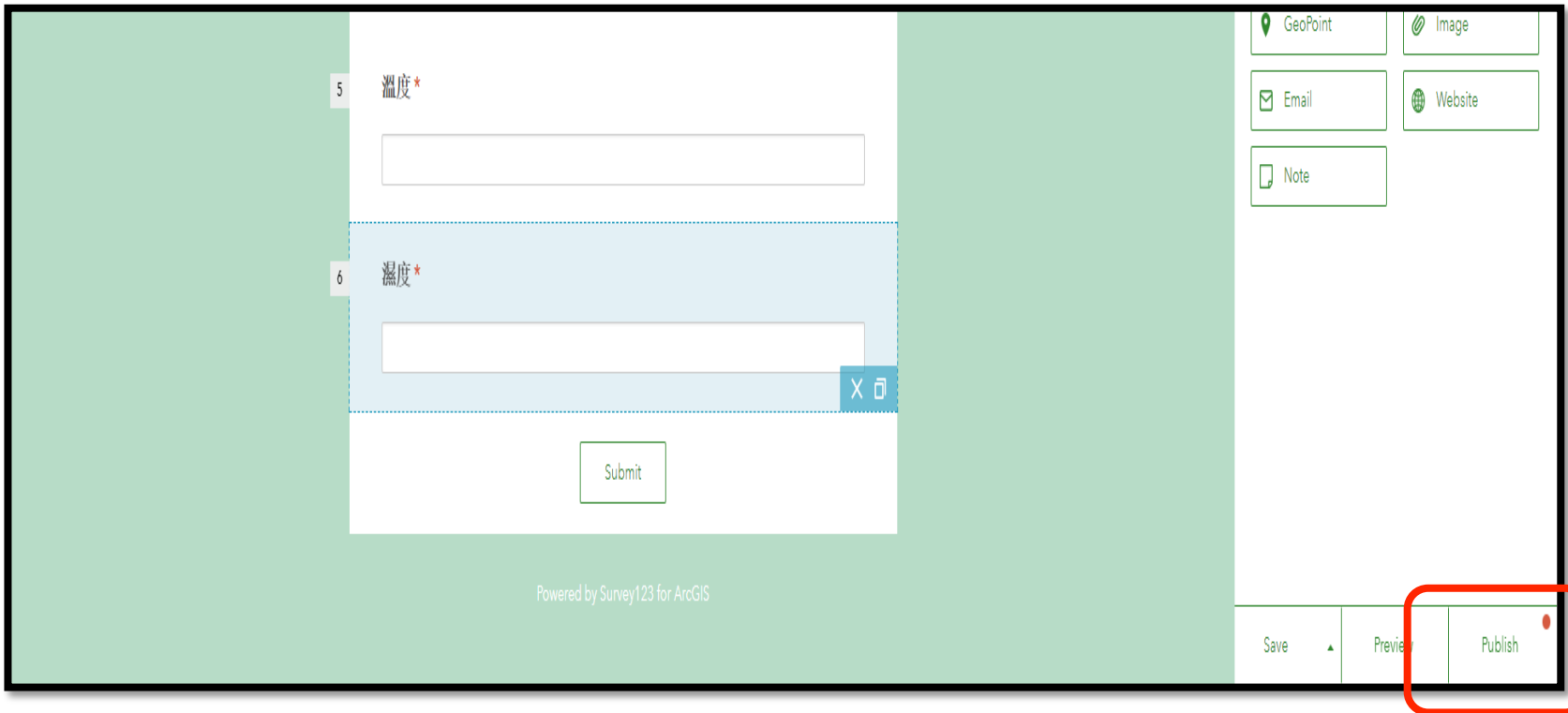


The screenshot shows the 'Multiline Text' question configuration panel. At the top, there are four tabs: 'Add' (with a plus icon), 'Edit' (with a pencil icon), 'Appearance' (with a palette icon), and 'Settings' (with a gear icon). The 'Edit' tab is active. Below the tabs, the question title 'Multiline Text' is displayed. The 'Label' field contains the text '有關該區微氣候的特徵'. The 'Hint' field contains the text 'Tell user how to fill this question' and includes a rich text editor toolbar with buttons for bold (B), italic (A), bulleted list, numbered list, indent, and link. The 'Default Value' field contains the text 'Predefined answer for this question'. The 'Validation' section has a checked checkbox and the text 'This is a required question'. At the bottom, there are three buttons: 'Save', 'Preview', and 'Publish'.



## Save the Project : Survey123 for ArcGIS Guideline

Save your project by clicking the **SAVE** button on lower right.



5 溫度\*

6 溫度\*

Submit

Powered by Survey123 for ArcGIS

GeoPoint Image

Email Website

Note

Save Preview Publish

## Save the Project : Survey123 for ArcGIS Guideline

- You can preview the whole survey by clicking the **Preview** button.
- By clicking the button on the right, you can preview your survey in a desktop **computer, a smartphone or tablet**.
- Click “X” to close the Preview window.
- if you are satisfy with the question and layout, you can click **Publish** to send it to ArcGIS Online.



## Share the Project : Survey123 for ArcGIS Guideline

- Share to Group
- Share via web link

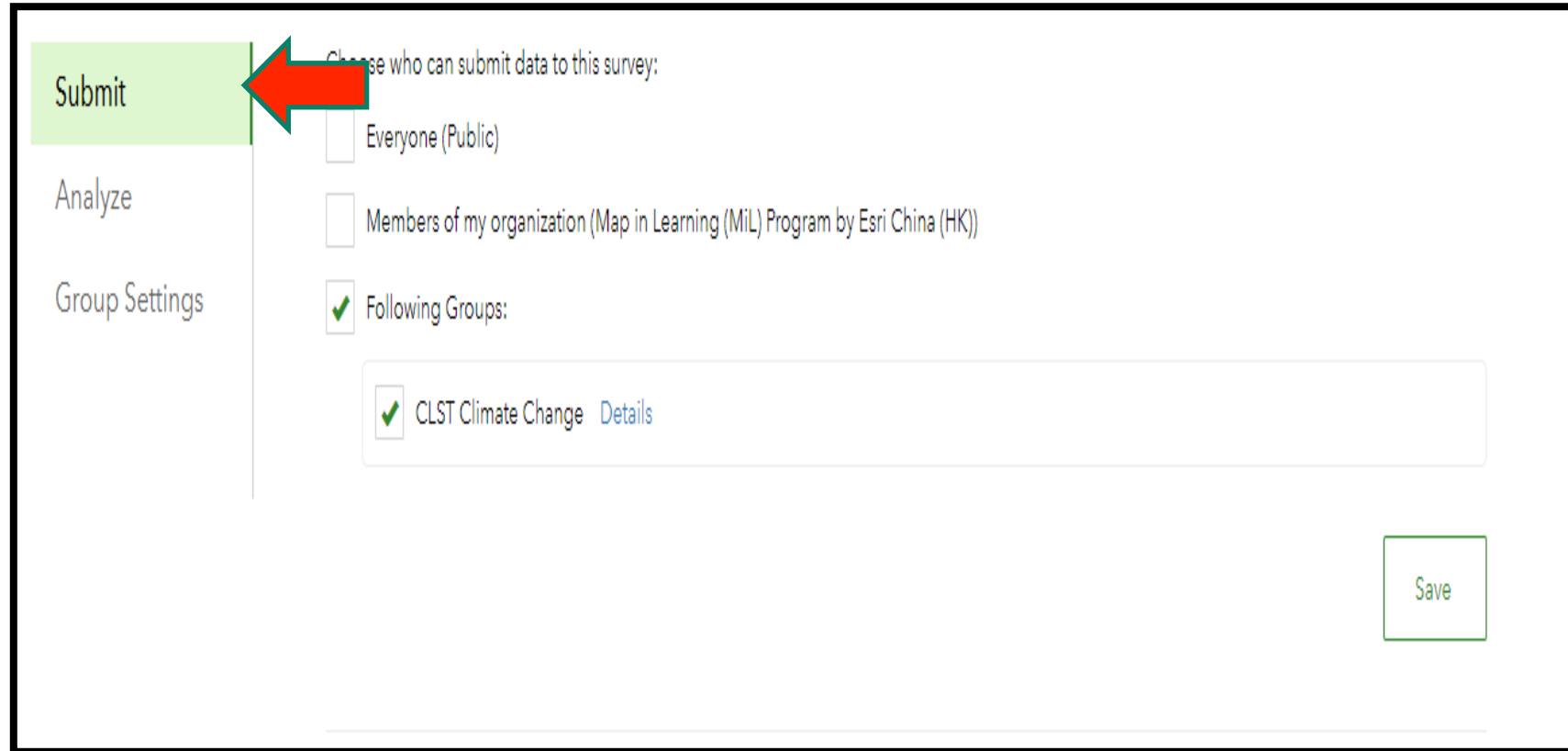
## Share the Project : Survey123 for ArcGIS Guideline

### Share to Group

In cases you wish to assign students into different groups, for doing group project or class management, you can use the **Group function** in ArcGIS Online to share specific content to a group of students.

To share the survey to specific group in Survey123 for ArcGIS. First, click the thumbnail of your survey project in **My Surveys** section, and then click **Collaborate** in the upper right banner. "**Submit**" item will be as default to show. Then select Following Groups, and select the Group you want to share in the box below. Click **Save** when finish.

## Share the Project : Survey123 for ArcGIS Guideline

A screenshot of the Survey123 web interface showing the 'Share' settings. On the left is a navigation menu with 'Submit' (highlighted in green), 'Analyze', and 'Group Settings'. A red arrow points to the 'Submit' button. The main area is titled 'Choose who can submit data to this survey:'. It contains three options: 'Everyone (Public)' with an unchecked checkbox, 'Members of my organization (Map in Learning (MiL) Program by Esri China (HK))' with an unchecked checkbox, and 'Following Groups:' with a checked checkbox. Below 'Following Groups:' is a list of groups, with 'CLST Climate Change' selected (checked checkbox) and a blue 'Details' link next to it. A green 'Save' button is located at the bottom right of the form.

Submit

Analyze

Group Settings

Choose who can submit data to this survey:

☐ Everyone (Public)

☐ Members of my organization (Map in Learning (MiL) Program by Esri China (HK))

☒ Following Groups:

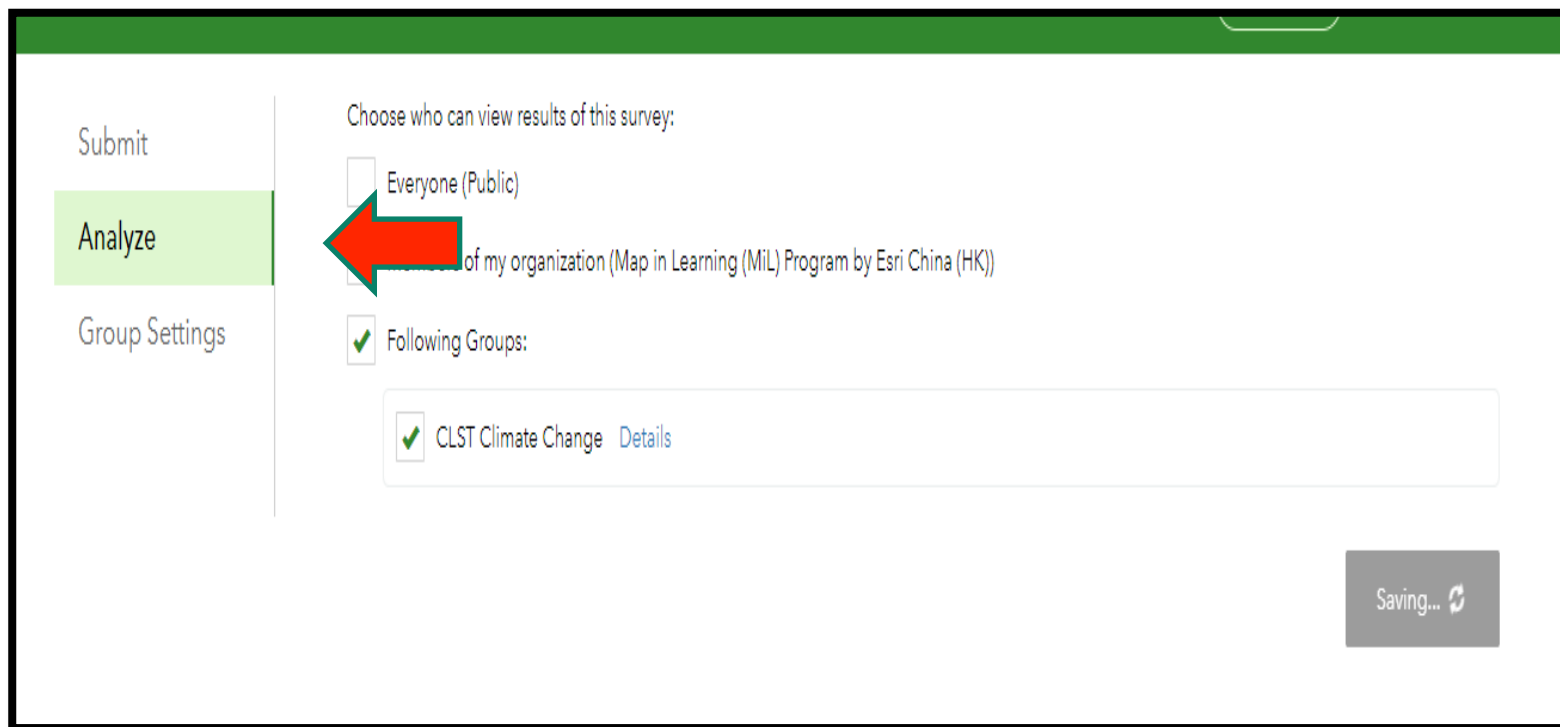
☒ CLST Climate Change [Details](#)

Save



## Share the Project : Survey123 for ArcGIS Guideline

- To open the **analyze function** to specific group in Survey123 for ArcGIS (details will be covered in later part of this manual)
- In **the Collaborate** section, select **Analyze**, then select Following Groups, and select the Group you want to share in the box below. Click Save when finish.



Submit

Analyze

Group Settings

Choose who can view results of this survey:

☐ Everyone (Public)

☐ Members of my organization (Map in Learning (MIL) Program by Esri China (HK))

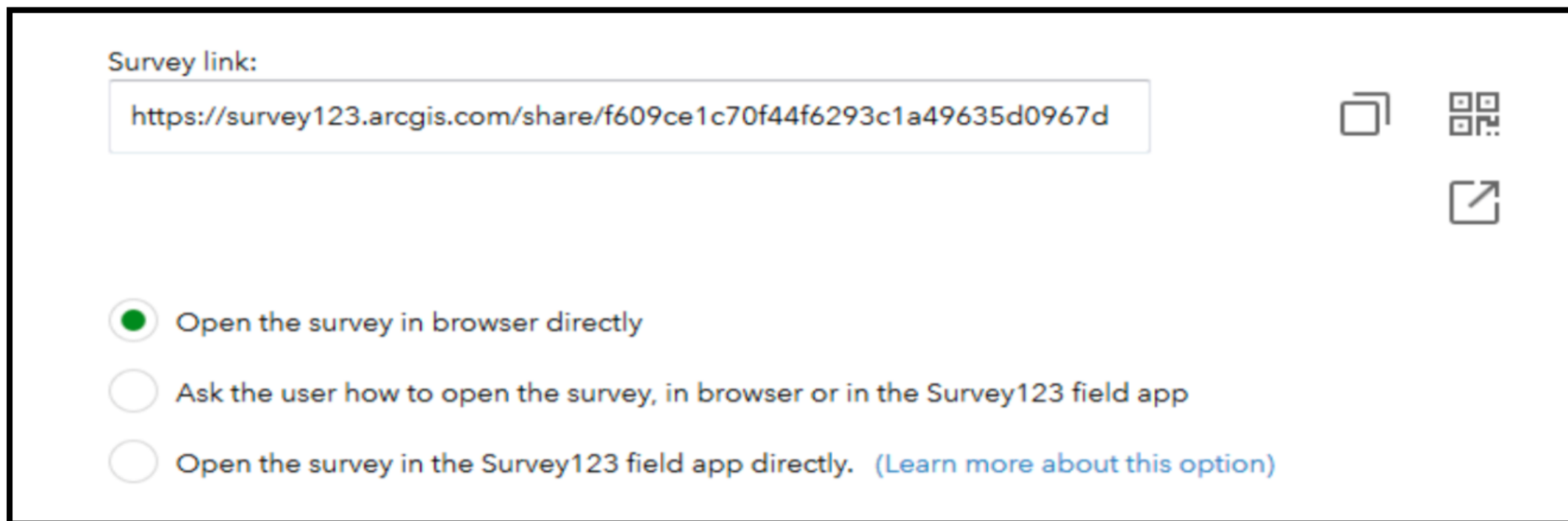
☒ Following Groups:

☒ CLST Climate Change [Details](#)

Saving...



## Share the Project : Survey123 for ArcGIS Guideline .


- Share via web link In the lower part of the Collaborate section, you can find the **web link/QR code** for accessing the survey.
- Note: ArcGIS Online account's log-in to the survey is required if your survey **is limited to your school only**.
- The link for each survey is generated dynamically, please do not copy the link from the screen capture below as your share link.



Survey link:

<https://survey123.arcgis.com/share/f609ce1c70f44f6293c1a49635d0967d>



☒ Open the survey in browser directly

☐ Ask the user how to open the survey, in browser or in the Survey123 field app

☐ Open the survey in the Survey123 field app directly. [\(Learn more about this option\)](#)

## Accessing the Project : Survey123 for ArcGIS Guideline

- Web Link
- Dedicated App

## Accessing the Project : Survey123 for ArcGIS Guideline

### Accessing via Web Link

- If you had shared the survey with web link or QR code, the survey will open in the web browser.
- Survey123 is currently supported on the following browsers:

- ☐ Chrome
- ☐ Firefox
- ☐ Safari
- ☐ Edge
- ☐ Internet Explorer 11

## Accessing the Project : Survey123 for ArcGIS Guideline

### Accessing via Dedicated App

- The dedicated app provides an easy and convenient way for you or your students to **view** and **complete** the surveys assigned to them in a single app.
- The app can be downloaded at: <http://doc.arcgis.com/en/survey123/download/>
- Survey123 is currently available on the following platforms:
  - ☐ Windows 7 or later
  - ☐ Mac OS X 10.10 or later
  - ☐ Android 4.1 or later
  - ☐ iOS 8 or later
  - ☐ Windows Phone 10 or later
  - ☐ Ubuntu (Linux) 14.04 LTS (64 bit) or later



## Submitting the Project : Survey123 for ArcGIS Guideline

### Submitting the Survey via Dedicated App

- Doing the Survey with Web Browser
- Doing the Survey with Mobile Apps

## Submitting the Project : Survey123 for ArcGIS Guideline

### Doing the Survey with Web Browser

- Surveys made in the Survey123 with web link can have results submitted immediately through simply pressing the **Submit button**. There is no caching to send later.
- Reminder: Be aware that after sending a survey it cannot be edited. Make sure, before sending the survey, that all details are correct.

## Submitting the Project : Survey123 for ArcGIS Guideline

### Doing the Survey with Mobile Apps

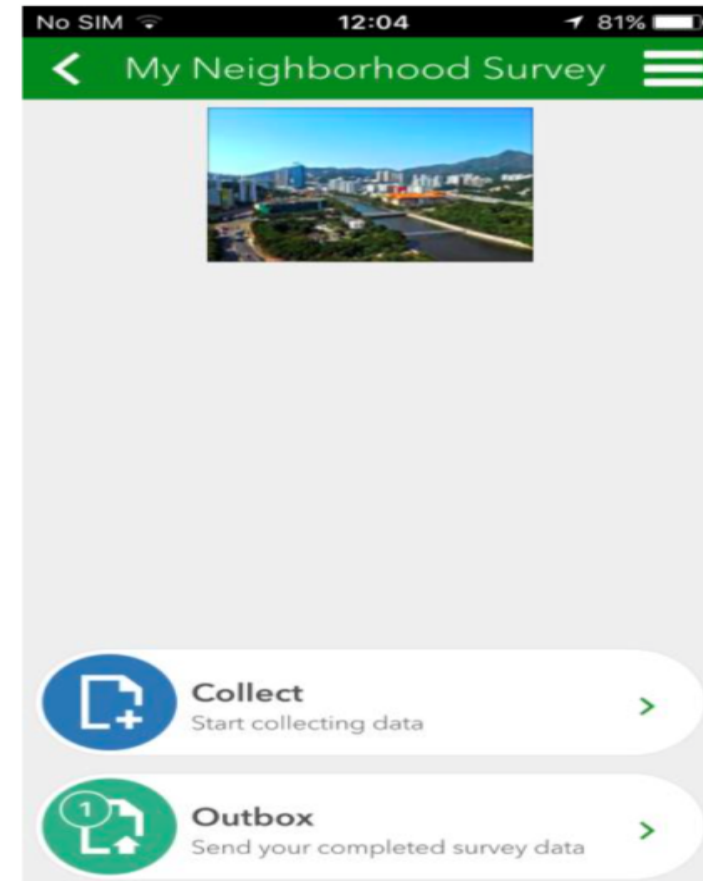
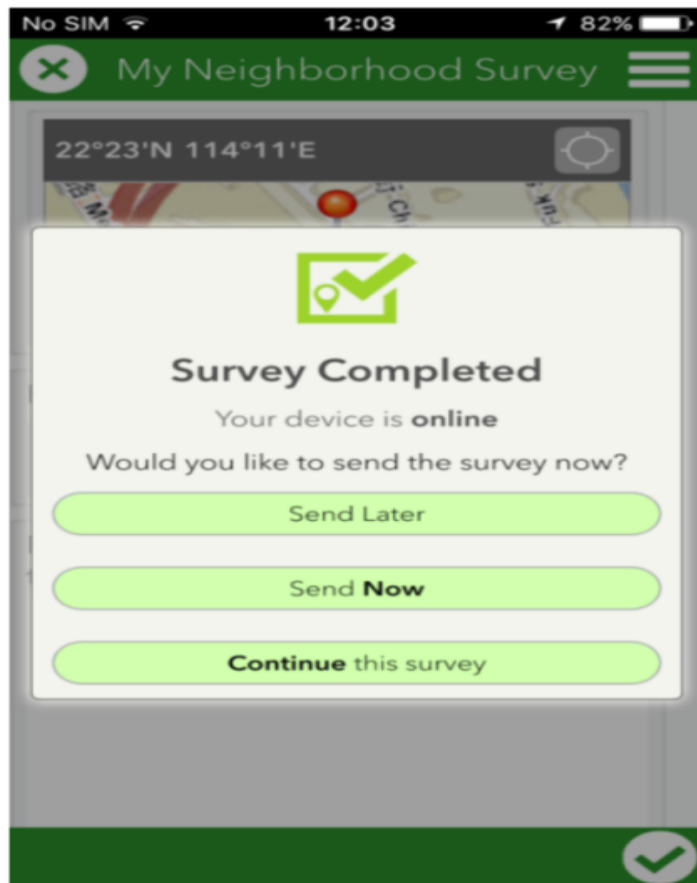
In using Survey123 app on mobile platform like iOS and Android, students can save a draft survey record on their phone, and continue work on it before submitting the record to ArcGIS Online.

Whenever user wish to upload or save the survey record, students can click the icon at the bottom right corner.

- i. To upload your record, tab Send Now; to save your record, tab Send Later.
- ii. To upload continue your previously saved survey, tab the Outbox icon upon opening the survey.

## Submitting the Project : Survey123 for ArcGIS Guideline

### Doing the Survey with Mobile Apps



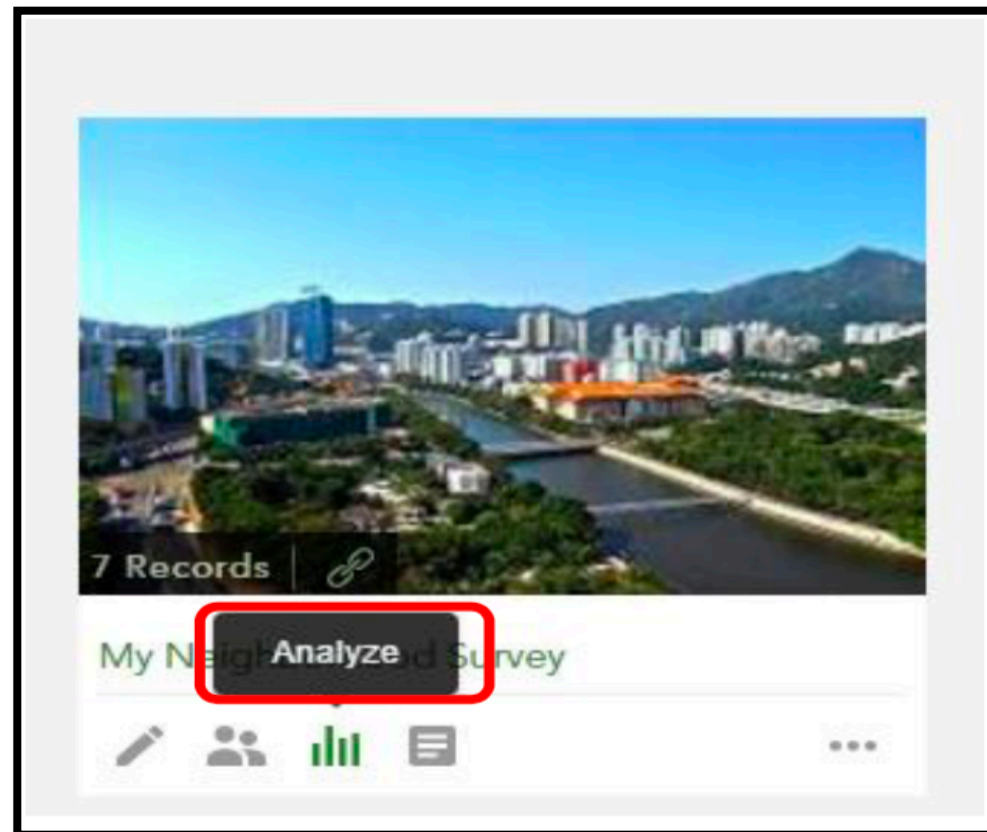
## Understanding Your Data

- Teachers and students can easily **see the result** for each question in the form of charts, tables or map (options will be varied depending on the type of questions) with the **Analyze function** of Survey123.
- Currently, this function is available on **web version** (survey123.arcgis.com) only.

## Understanding Your Data

### Teachers

After click the **Analyze** button under the thumbnail of your survey to view the result.

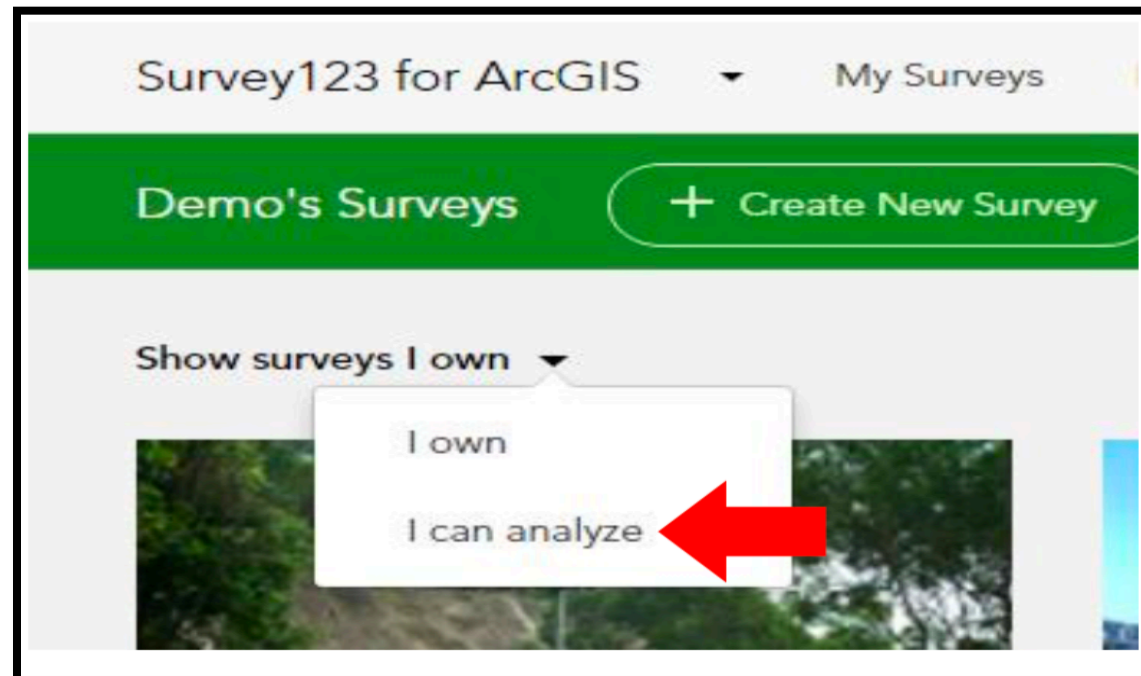




## Understanding Your Data

### Student

- If the students wish to perform **analyze function to their own survey**, upon log-in to the account, they need to select Show surveys I can analyze in the top left corner of the main page of Survey123.
- Then click the thumbnail of your survey, then click **Analyze** on the top banner to view the result.



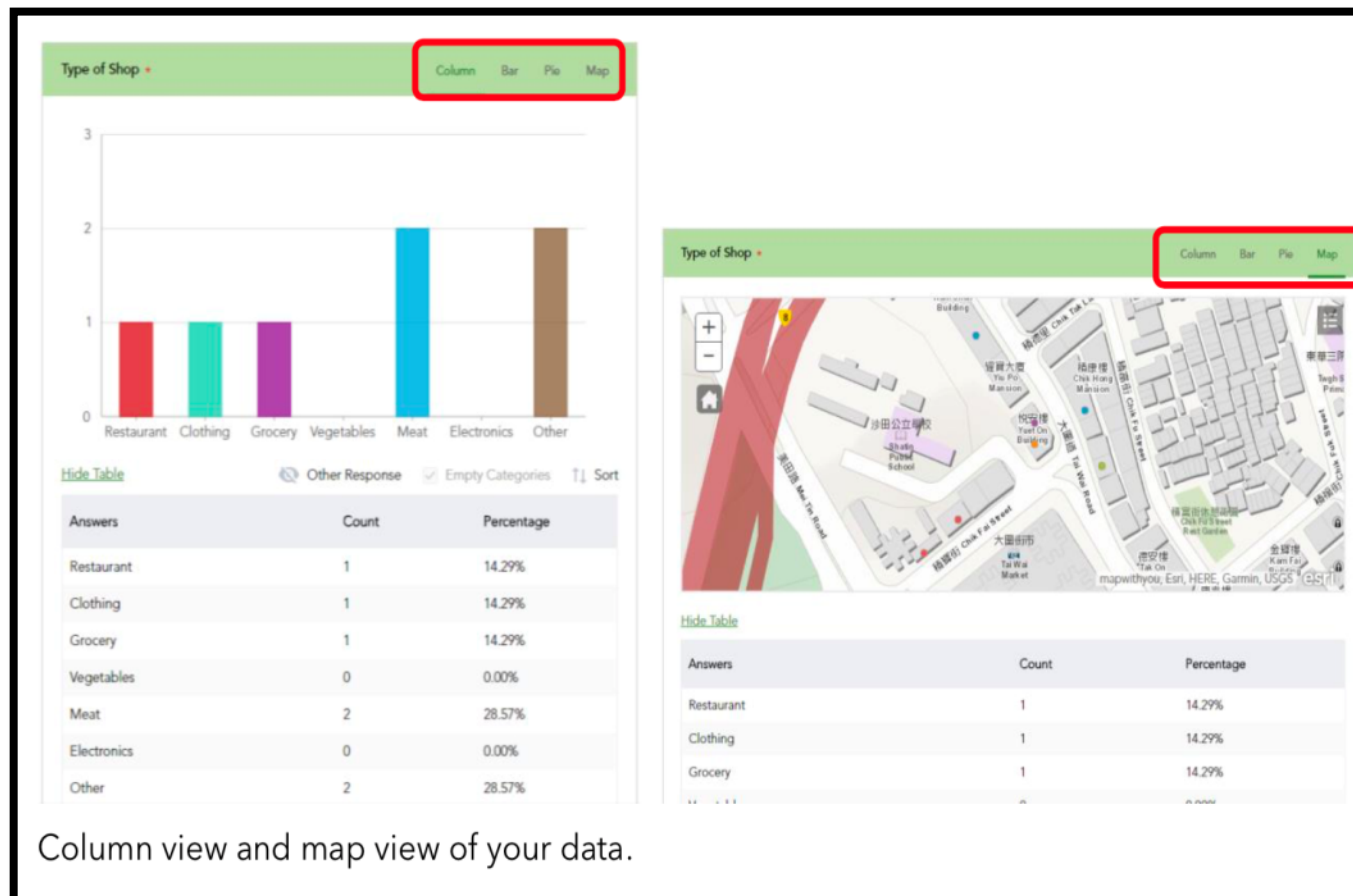
## Understanding Your Data

### Viewing Your Result for Each Questions

- Depending on your questions, Survey123 will present the data in **different form**.
- For example, in the question of “Type of Shop”, it had the option of showing **column chart, bar chart, pie chart or on a map**.
- You can choose these options on the banner for each question.\_

## Understanding Your Data

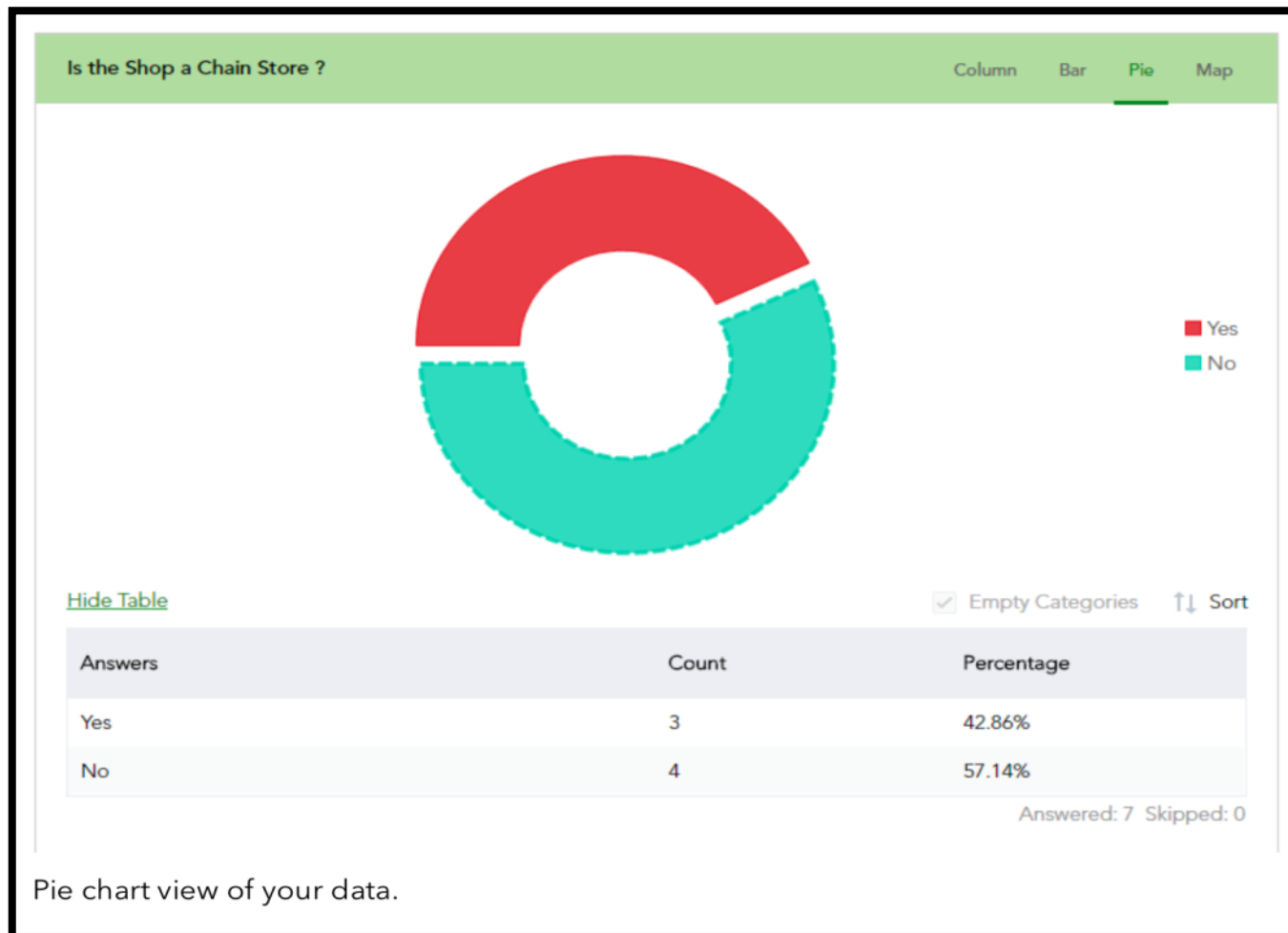
### Viewing Your Result for Each Questions



Column view and map view of your data.

## Understanding Your Data

### Viewing Your Result for Each Questions



## Understanding Your Data

### An Overview of Your Survey with a Map

- The **Data tab** contains ways to view all of your survey responses as raw data and mapping.
- This provides alternative methods to examine your results as well as **convert your data into additional formats** for use by other applications.
- The Data page displays your data through a table and map with all results. The map automatically zooms to a level displaying as many of your results as possible.

## Understanding Your Data

### An Overview of Your Survey with a Map

- The Data page displays your data through **a table** and map with all results.
- The map **automatically zooms** to a level displaying as many of your results as possible.





## Understanding Your Data

### An Overview of Your Survey with a Map

- Click an entry in the table to focus on its point on the map, and open an Individual Response section, detailing the single response as much as possible.
- You can also do the same in reverse, clicking a map point to highlight an individual entry in the table and in the Individual Response section.
- This is a quick way to see all answers for a specific entry. From the **Individual Response** section you can also choose to **Print Current Response**



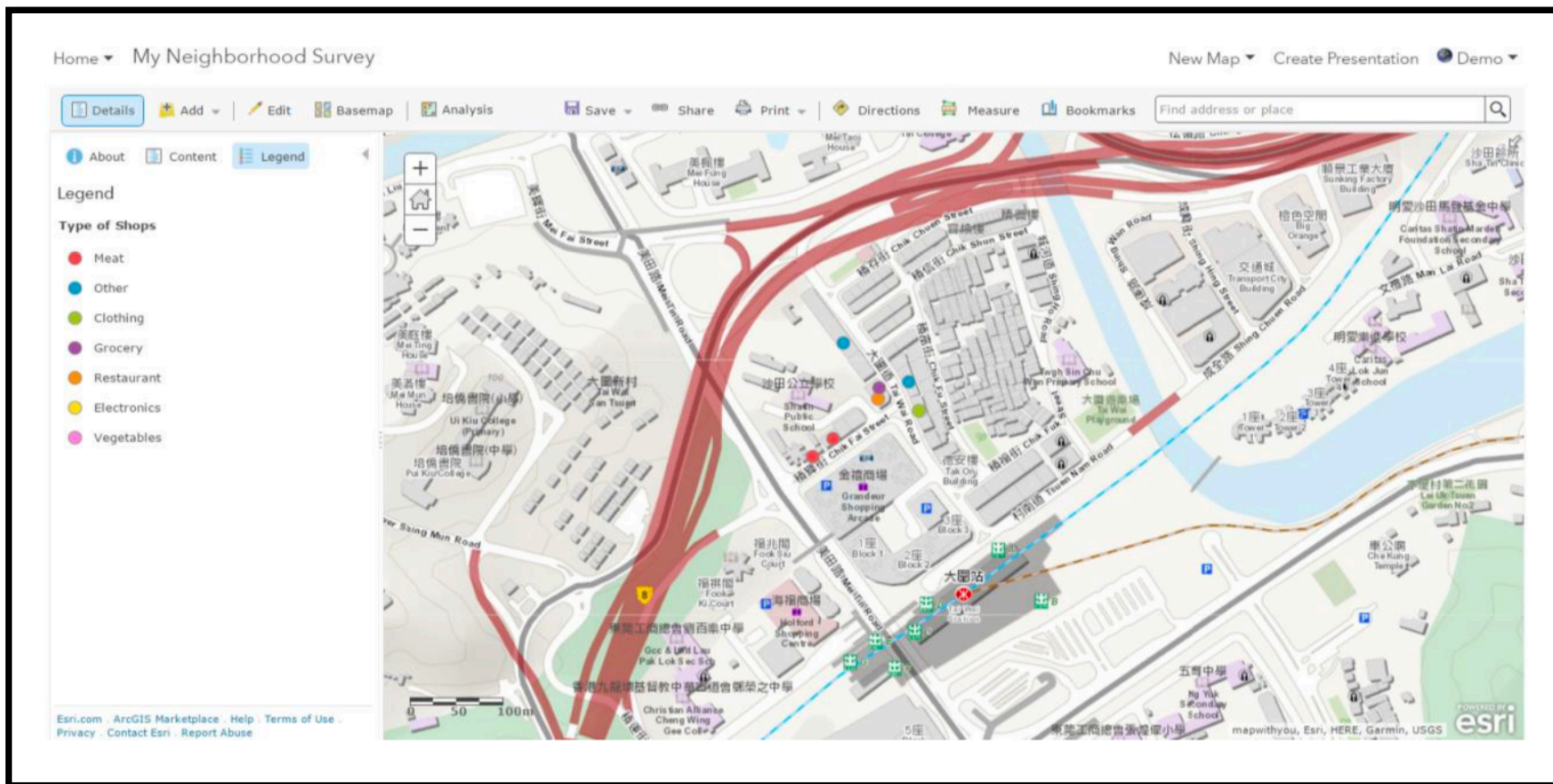
surveyPoint ( 7 features, 1 selected)			Options	Individual Response	
Date of Survey	Name	Type of Shop		Date of Survey	Submitted By:
Feb 16,2017	McDonald's	Restaurant		Feb 16,2017	sslam_agolhk
Feb 16,2017	Park n Shop	Grocery		Name	Submitted Time:
				McDonald's	02/16/2017 12:07:46
Feb 16,2017	ABC Clothing	Clothing		Type of Shop	<div>Print Current Response</div>
Feb 16,2017	Tai Wai Pharmacy	Other		Restaurant	
Feb 16,2017	Hang Seng Bank	Other		Is the Shop a Chain Store ?	
Feb 16,2017	Fai Kei	Meat		Yes	

Download

02/16/2017 - 02/16/2017



# Understanding Your Data



## 4. 香港中文大學戶外考察 (CUHK CLST Eduventure + ESRI Survey 123)



ESRI SURVEY 123: <https://survey123.arcgis.com/share/79eb870e1a01432f9ef19e0ba0341490?open=menu>



(DEMO) CUHK Eduventure 考察探索：香港中文大學崇基書院



考察景點

☐ 熱點一：中大教育學院

☐ 熱點二：崇基禮拜堂



## CUHK CLST EduVenture:





# 香港中文大學戶外考察 (CUHK CLST Eduventure)

活動 – 體驗全球定位學習系統(EduVenture)

地點：香港中文大學崇基書院

目的：認識崇基書院實地考察

工具：iPad + Pocket Wifi

- 景點一：中大教育學院
- 景點二：崇基禮拜堂
- 景點三：利希慎音樂廳
- 景點四：崇基學院牟路思怡圖書館
- 景點五：眾志堂
- 景點六：未圓湖
- 景點七：港鐵火車站



# 景點一：中大教育學院



問題一：  
何添樓於何年建成？

問題二：  
何添樓樓高多少層？

問題三：  
樓宇殘破程度評分  
(5為佳，1 為劣)

問題四：  
土地利用類型？

問題五：  
何添樓的可達度如何？



## 景點二：崇基禮拜堂



問題一：  
崇基禮拜堂於何年建成？

問題二：  
崇基禮拜堂屬於甚麼土地利用類型？

問題三：  
錄音：應否保留崇基禮拜堂 抑或  
改建為新教學樓以擴大校園可使用  
土地？

問題四：  
拍攝一張你認為能夠代表崇基禮拜  
堂的照片



# 景點三：利希慎音樂廳



問題一：  
利希慎音樂廳可容納多少座位？

問題二：  
利希慎音樂廳屬於甚麼學系？

問題三：  
利希慎音樂廳由那位建築師負責設計？

問題四：  
拍攝一張你認為能夠代表利希慎音樂廳的照片



## 景點四：崇基學院牟路思怡圖書館



問題一：  
牟路思怡圖書館於何年成立？

問題二：  
為什麼名命為牟路思怡圖書館？

問題三：  
以概念圖將你近來閱讀的圖書分類

問題四：  
圖書館人流統計  
請在圖書館門口作三分鐘統計，平均每分鐘進入離開的人數為多少？





# 景點五：眾志堂



問題一：  
你知道特價飯的別名是甚麼？

問題二：  
錄音訪問一位同學對眾志堂食品  
及價格的意見

問題三：  
與受訪者拍攝一張合照



# 景點六：未圓湖



問題一：  
請利用iPad拍攝未圓湖下列地貌  
哲徑



拱橋



# 景點七：港鐵大學火車站



問題一：  
港鐵大學火車站屬於那種土地利用  
類型？

問題二：  
港鐵大學火車站有多少商鋪？

問題三：  
拍攝一張港鐵大學火車站的照片

## 5. 課業簡介



# 課程習作

參考以往你帶領過的戶外考察，選擇其中一個地點，編寫一個 EduVenture 戶外學習活動套件，能發揮全球定位學習系統的優勢以支援學生進行有意義自主學習。

為方便學員完成學習活動設計，學員必須在第二節課前決定戶外學習地點，並在該地圖上選出三個以上不同的學習熱點(hotspot)，每點加入三條不同題型題目，以便在第二節課製作教材。

詳情參考習作工作紙

## 參考示例

- 屏山文物徑
- 粉嶺新舊市集城市發展(龍躍頭)
- 灣仔市區更新及保育
- 元朗區城市發展及保育
- 西貢海下灣



## 聯絡

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