

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 **第二節**



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

姓名： 文可為

MAN HO WAI, WALLACE

BSSc. (HON.) / PGDE (DIST.)/ MEd, CUHK

借調： 香港教育局資訊科技教育組

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



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

第二節重點：

1. 掌握如何修改或製作 CUHK CLST EduVenture 教件以進行 IBL 活動，
2. 通過應用適切相關理論去製作 EduVenture 教件，強化IBL 成效。

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.課業討論及回饋



課業討論及回饋

<https://drive.google.com/drive/folders/1Sl4eYCnnXC2le7ApKmOGHX9g-hzbEeiT?usp=sharing>



我的雲端硬碟 > __CLST_CLST_MOBILE_AB_ASSIGNMENT

名稱 ↑	擁有者	上次修改日期	檔案大小
W 01_(POON KAR YAN) CUHK_CLST_MOBILE (AB).docx	我	下午12:15 我	16 KB
W 02_(WONG CHI CHUEN) CUHK_CLST_MOBILE (AB).d...	我	下午12:15 我	18 KB
W 03_(NG SIK FUN) CUHK_CLST_MOBILE (AB).docx	我	下午12:14 我	16 KB
W 04_(CHAN WING YAN) CUHK_CLST_MOBILE (AB).docx	我	下午12:14 我	18 KB
W 05_(余啟冬) CUHK_CLST_MOBILE (AB).docx	我	下午12:14 我	16 KB
W 06_(TSE King) CUHKCLSTMOBILE (AB).docx	我	下午12:14 我	9 KB
W 07_(CHEUNG KIT) CUHK_CLST_MOBILE (AB).docx	我	下午12:14 我	151 KB
W 08_(LAU SHUI CHUN) CUHK_CLST_MOBILE (AB).doc	我	下午12:14 我	63 KB
W 09_Tong Cheuk Lam Charing CUHK_CLST_MOBILE (我	下午12:14 我	14 KB

2. 運用EduVenture Composer創建地圖數據 熱點和多媒體內容

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:



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



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



配合移動學習系統的探究式學習 (IBL)

CUHK EduVenture System

<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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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

EduVenture®戶外教材設計比賽 得獎作品

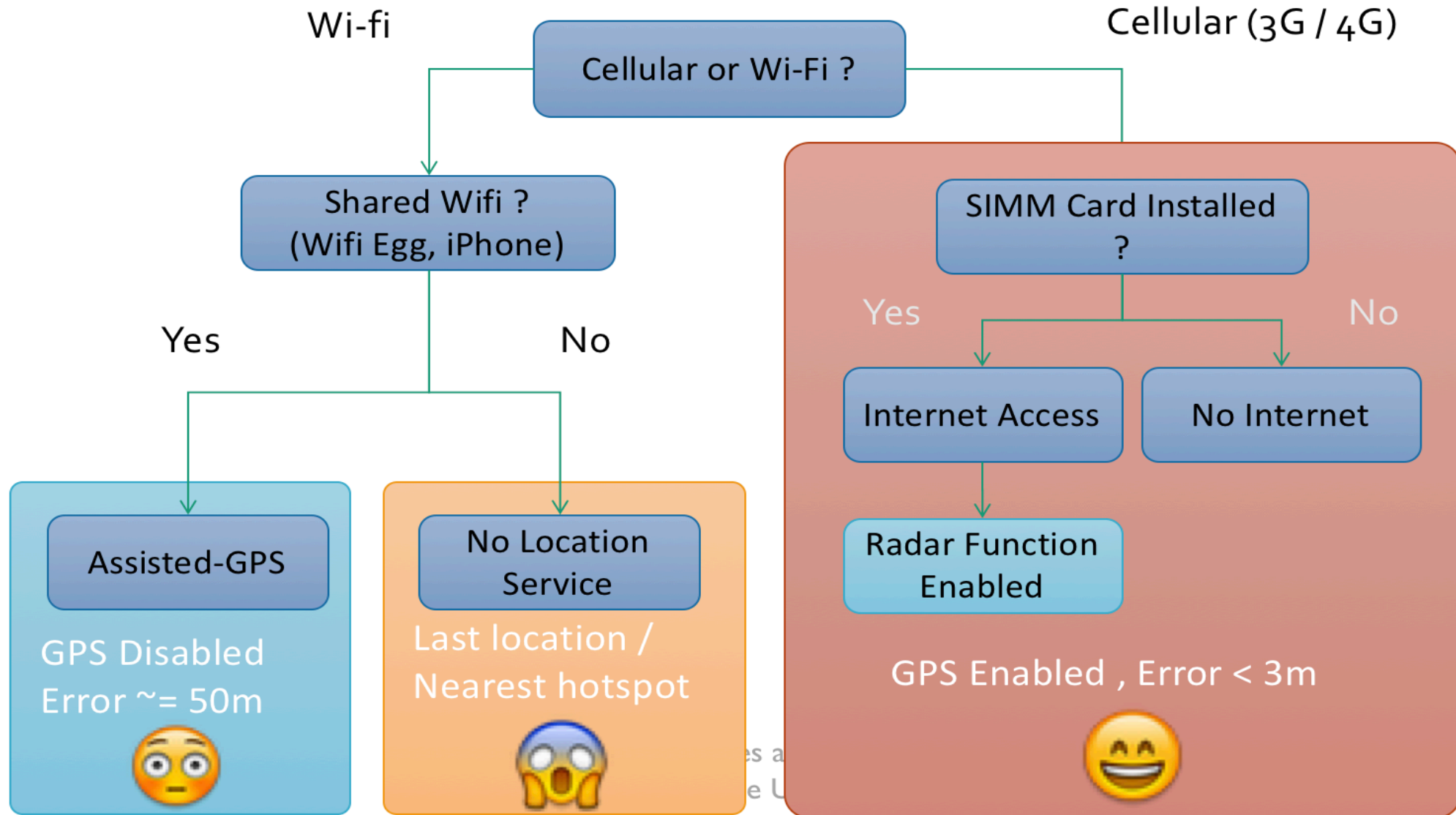
各得獎作品現已於 EduVenture® X應用內開放供所有用戶下載。

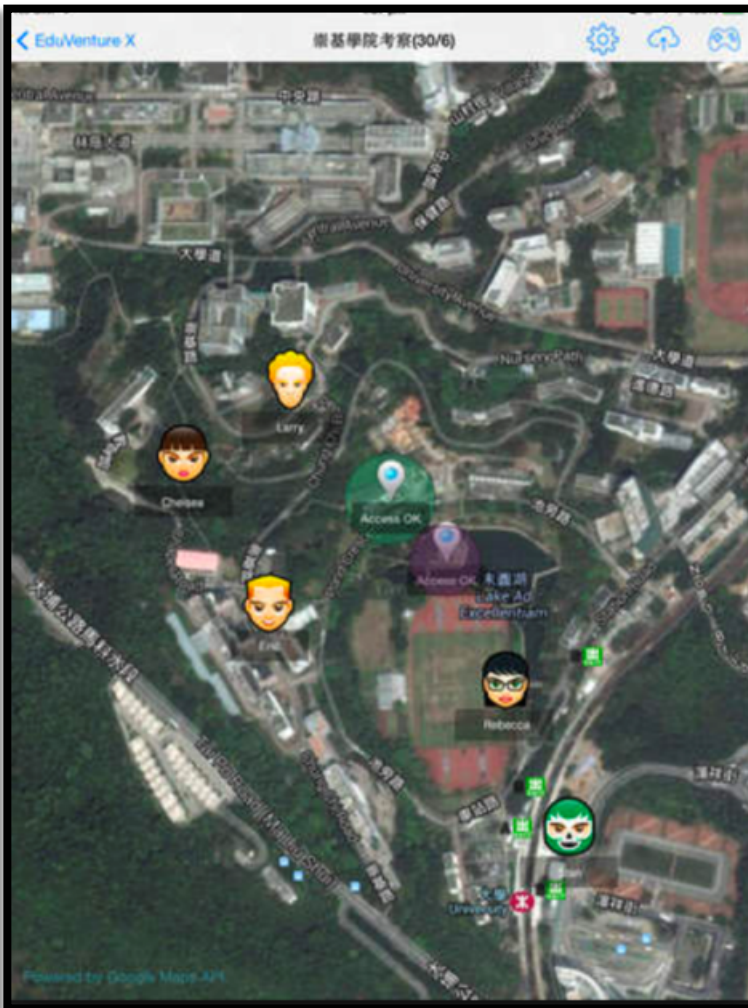
CUHK EduVenture System

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®.



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

CUHK EduVenture System

iPad



iPhone



CUHK EduVenture System

No SIM

3:08 pm

100%

EduVenture X

Materials in this device

All Materialso(Internet)

From everyone


From my school

Created date

Updated date

Views

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

EduVenture 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>

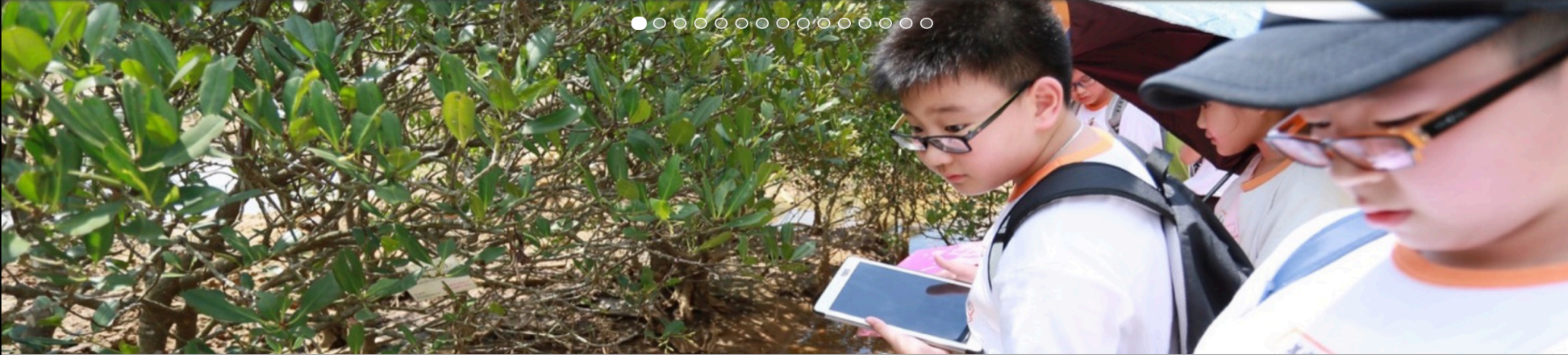
**CUHK**
香港中文大學


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

EduVenture®



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EduVenture® Composer


EduVenture® 短片教室





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

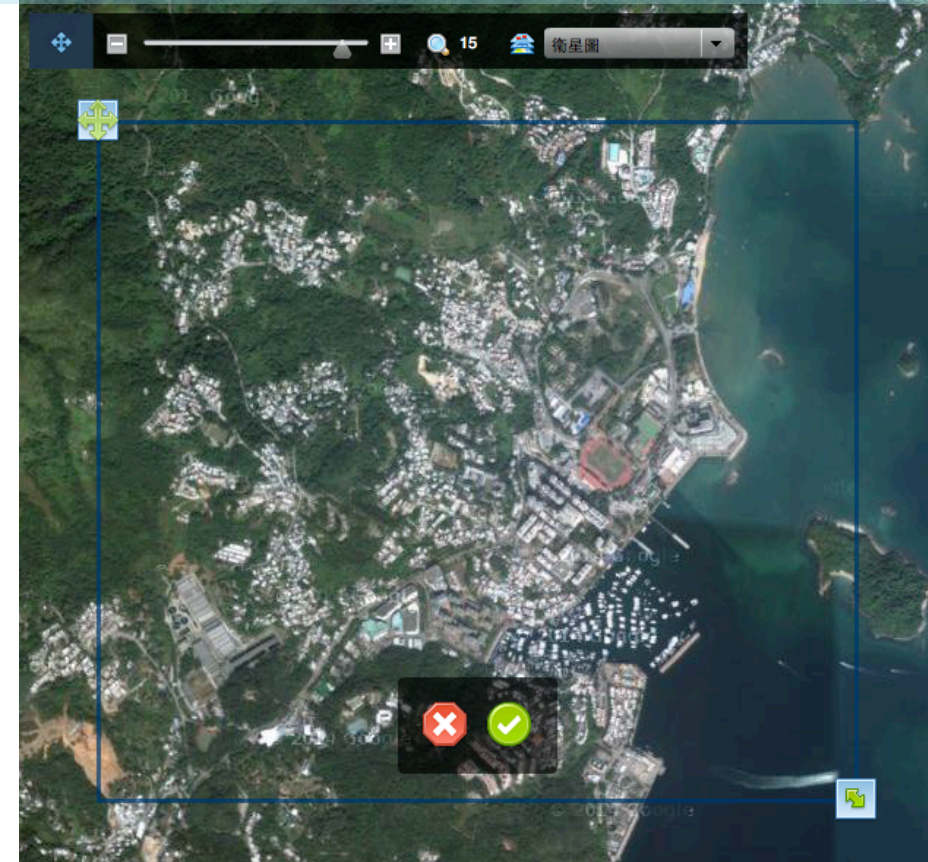
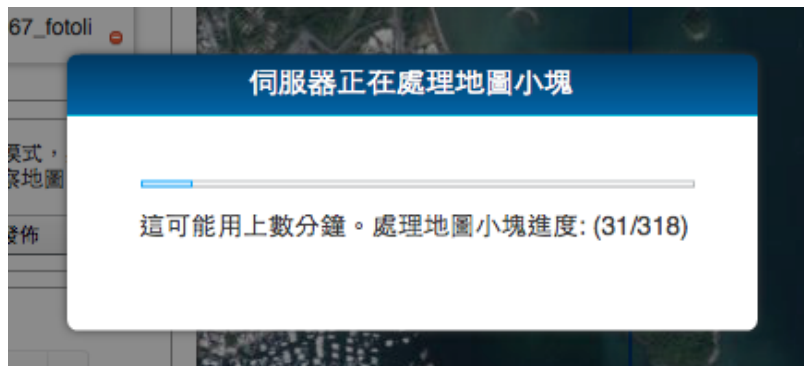


The screenshot shows the '創建新考察' (Create New Map) form. It includes fields for '考察名稱' (Map Name) with the example '西貢話當年', '考察描述' (Map Description), '考察用語言' (Map Language) set to '繁體中文', '是否共享' (Share) set to '限本校使用' (Limited to this school), and '代表顏色' (Representative Color) with a blue square. There is a section for '考察封面圖片(必須上載)' (Map Cover Image) with an '上傳本機檔案' (Upload local file) button and a note '圖片: 未有檔案' (Image: No file). Below this are two '未確定' (Undetermined) status indicators. At the bottom, there are dropdowns for '學習領域(KLA)' (Learning Area) and '學科' (Subject), both currently showing '請選擇' (Please select). A red 'X' button is on the bottom left and a green checkmark button is on the bottom right. A lightbulb icon and text indicate the current mode is '發佈模式' (Publish mode), where others can see the map, with a '轉為不發佈' (Switch to not publish) button.

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



CUHK EduVenture System

Hotspot Settings

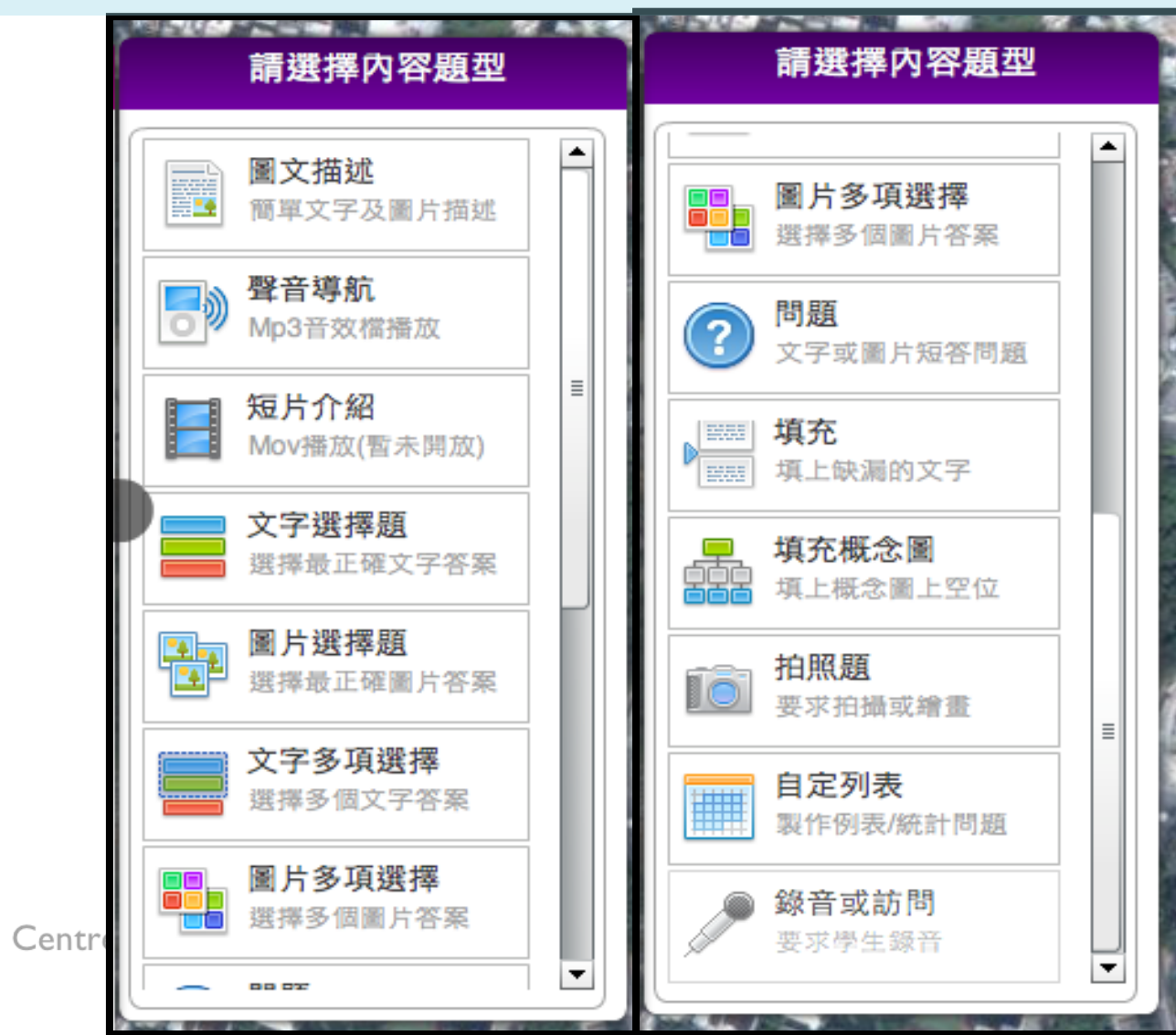
1. A proper name
2. Radius (A tree – Football field)
3. Larger instead of smaller
4. Give it a color

The screenshot shows the '編輯熱點' (Edit Hotspot) interface. At the top, the title '編輯熱點' is displayed. Below it, the '名稱' (Name) field contains '新熱點'. The '已定好位置' (Position set) section shows a map icon and a crosshair icon. The '顏色' (Color) section has a green color swatch. The '半徑' (Radius) section features a slider. The '熱點類別' (Hotspot category) dropdown is set to '正常顯示'. The '熱點內容' (Hotspot content) section has a green plus icon and a message: '未有任何熱點內容，請按「加」號創建新的內容'. A green checkmark icon is at the bottom.

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 

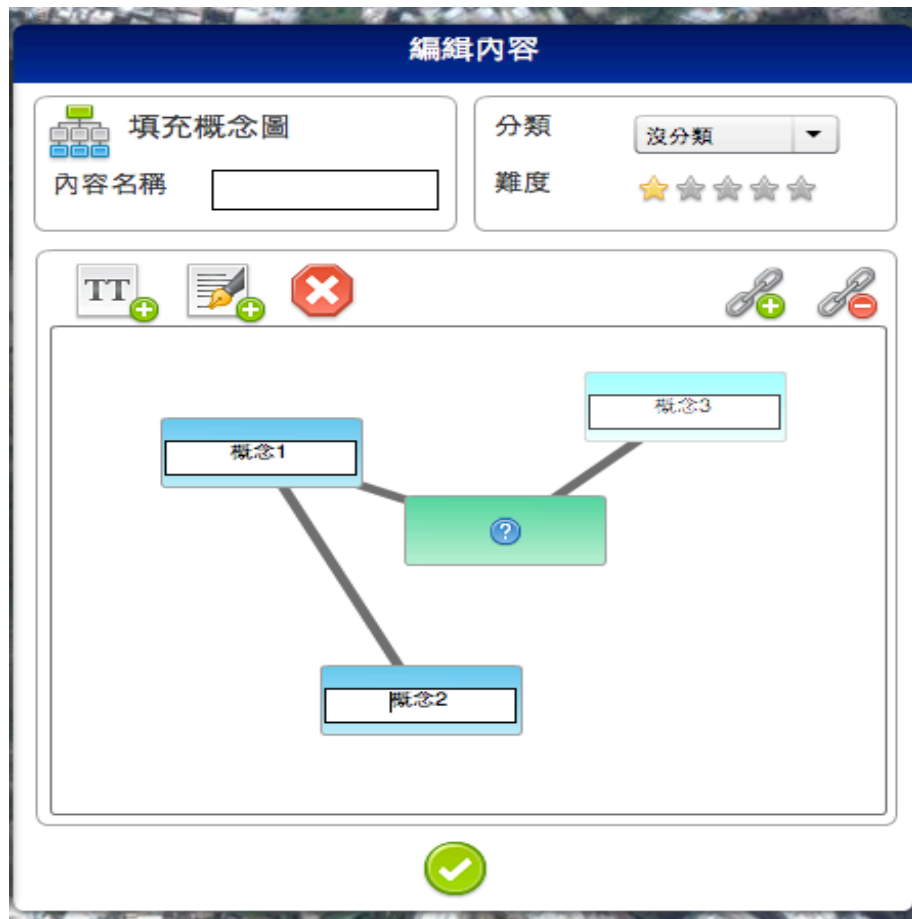
聲音描述

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



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



CUHK EduVenture System

Photo Taking

編輯內容

 拍照題

內容名稱

分類

難度     

拍攝題描述

Please take a photo of the temple



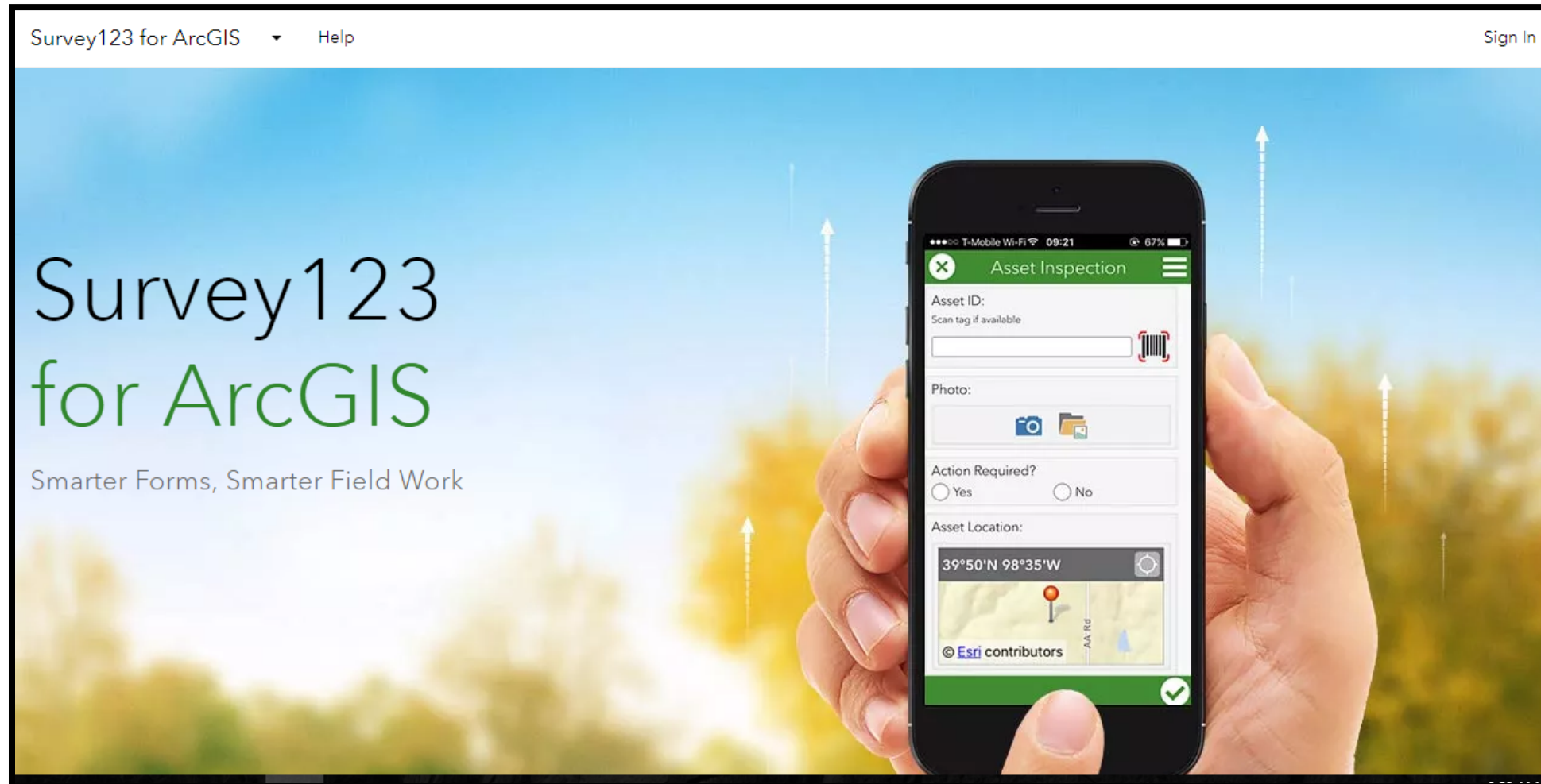
CUHK EduVenture System

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



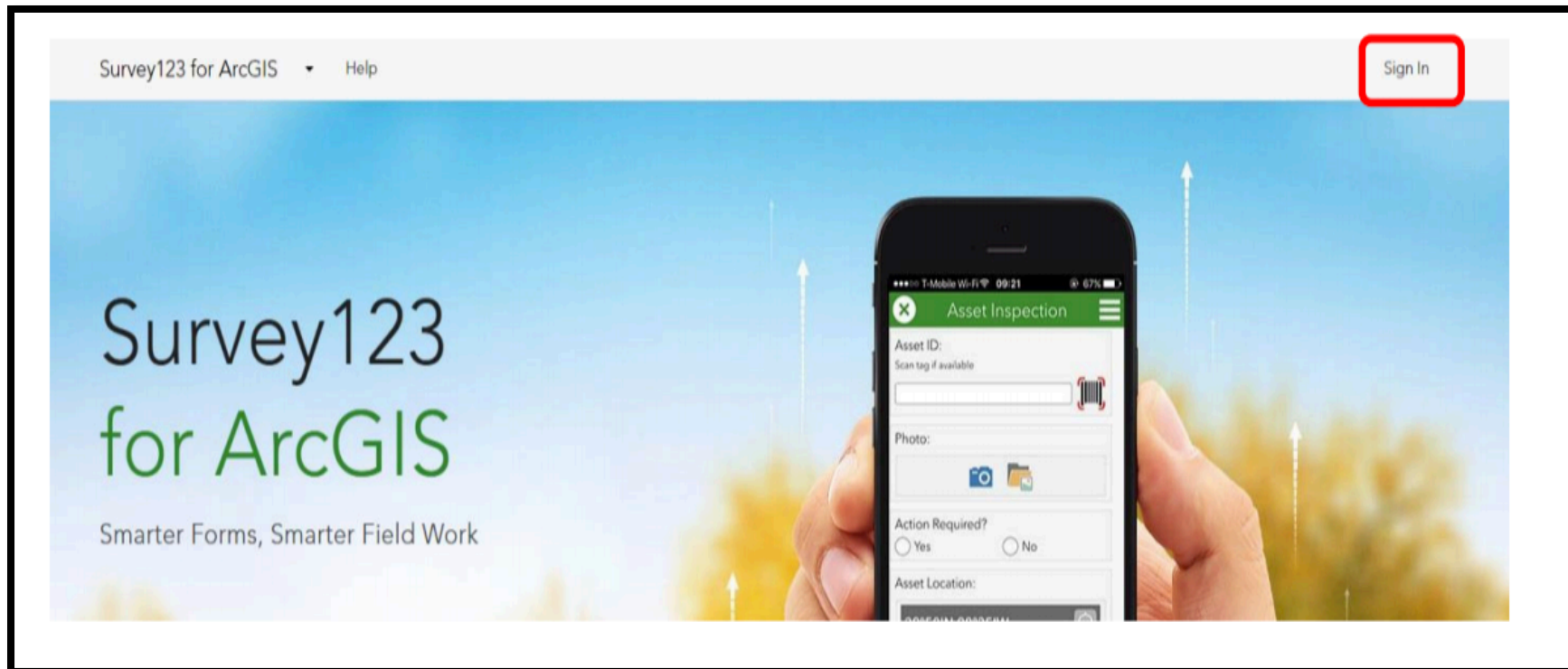
ESRI : Survey123 for ArcGIS (OPTIONAL)



ESRI : Survey123 for ArcGIS

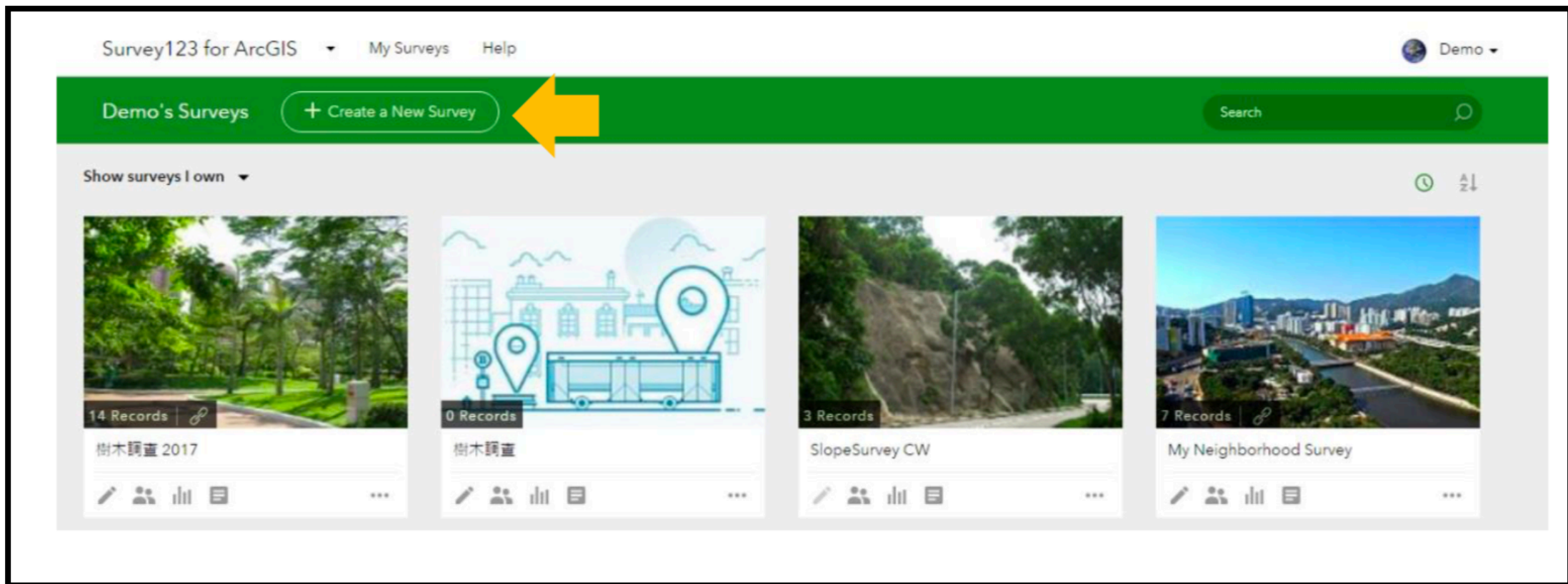
Preparing Your Survey

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



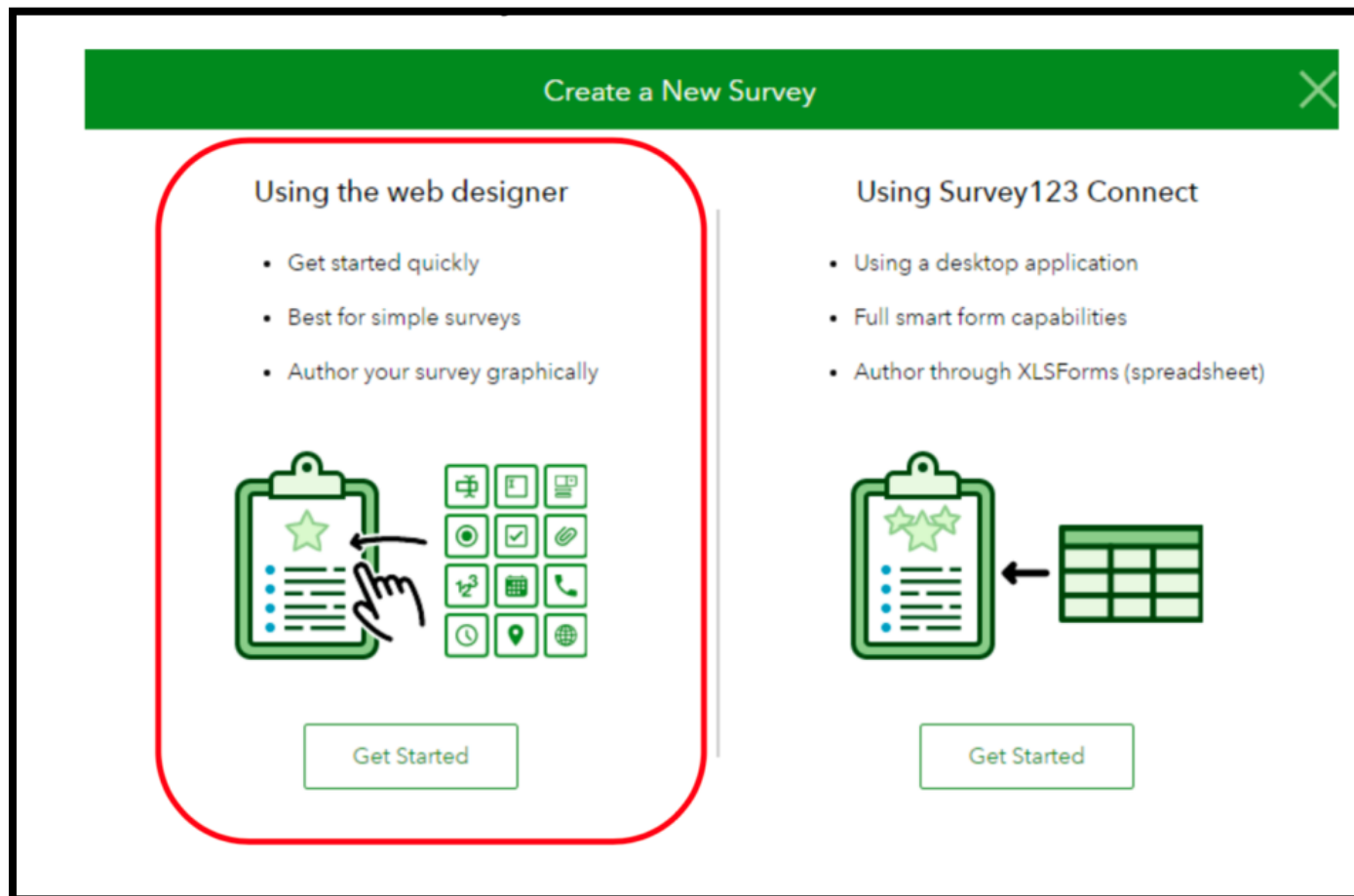
ESRI : Survey123 for ArcGIS

2. Click Create New Survey



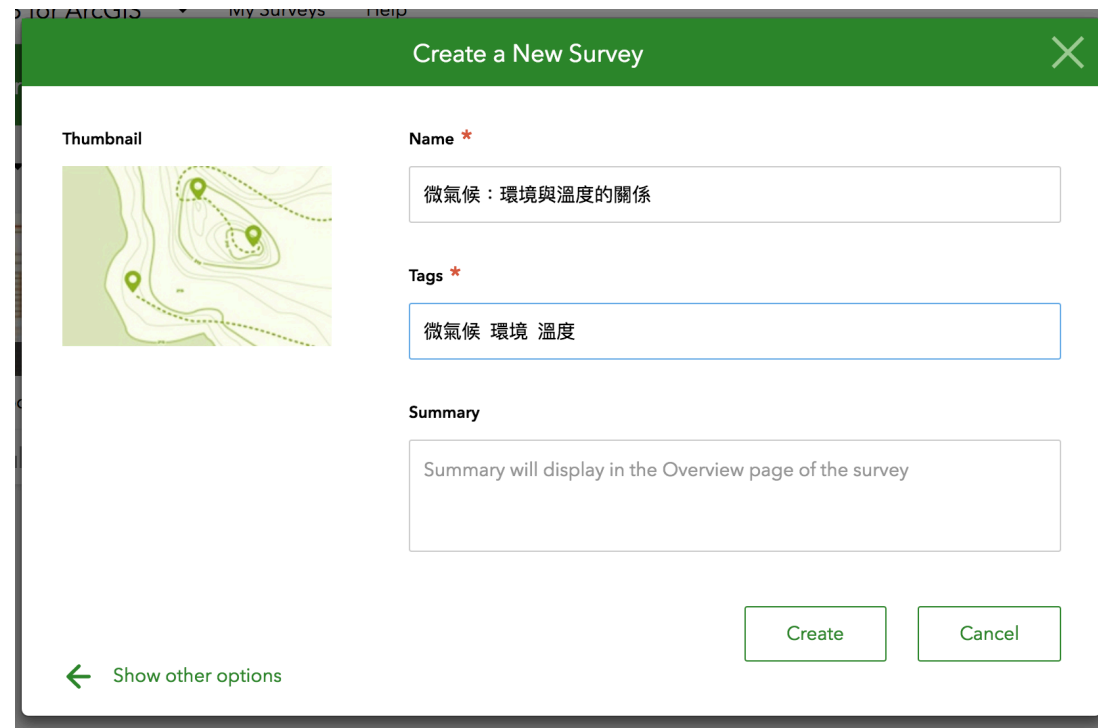
ESRI : Survey123 for ArcGIS

3. Click From Survey123 Web



ESRI : Survey123 for ArcGIS

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**.



Create a New Survey

Thumbnail

Name *

微氣候：環境與溫度的關係

Tags *

微氣候 環境 溫度

Summary

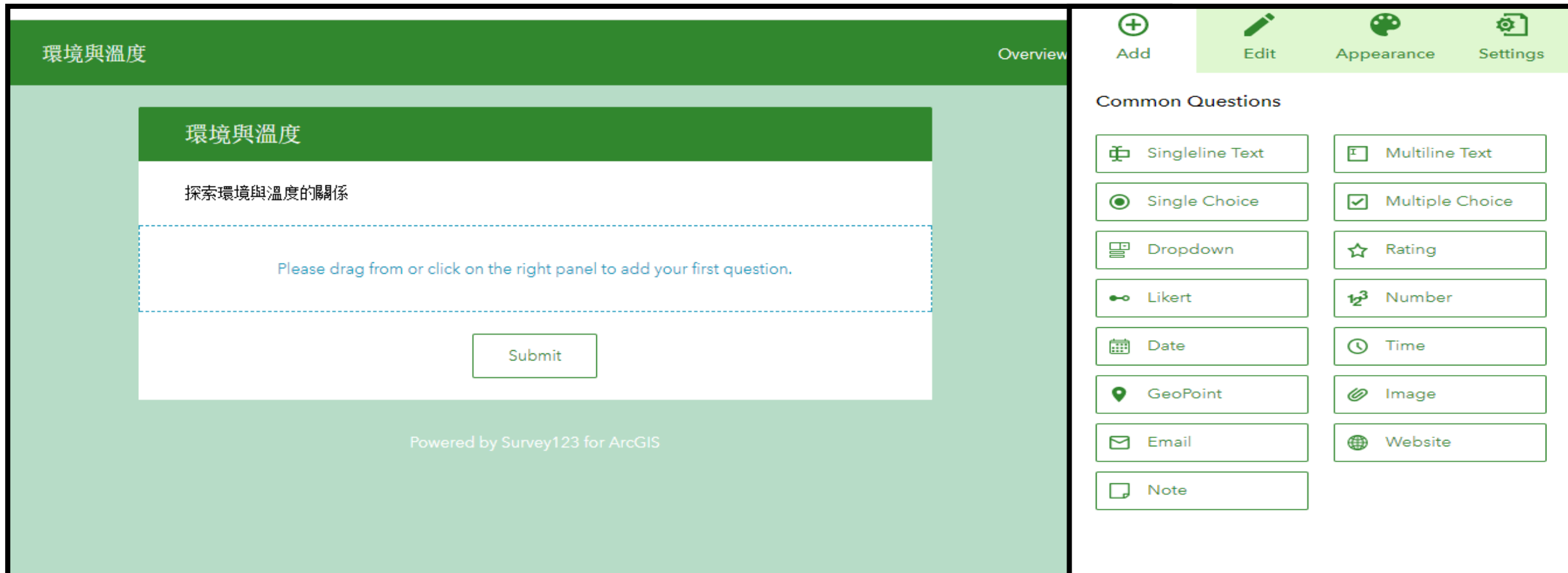
Summary will display in the Overview page of the survey

← Show other options

Create Cancel

ESRI : Survey123 for ArcGIS

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 has a green header with the title "環境與溫度" and a sub-header "探索環境與溫度的關係". Below the sub-header is a dashed box containing the text "Please drag from or click on the right panel to add your first question." and a "Submit" button. The right panel, titled "Common Questions", lists various question types: Singleline Text, Multiline Text, Single Choice, Multiple Choice, Dropdown, Rating, Likert, Number, Date, Time, GeoPoint, Image, Email, Website, and Note. The interface is powered by Survey123 for ArcGIS.

環境與溫度 Overview

環境與溫度

探索環境與溫度的關係

Please drag from or click on the right panel to add your first question.

Submit

Powered by Survey123 for ArcGIS

Common Questions

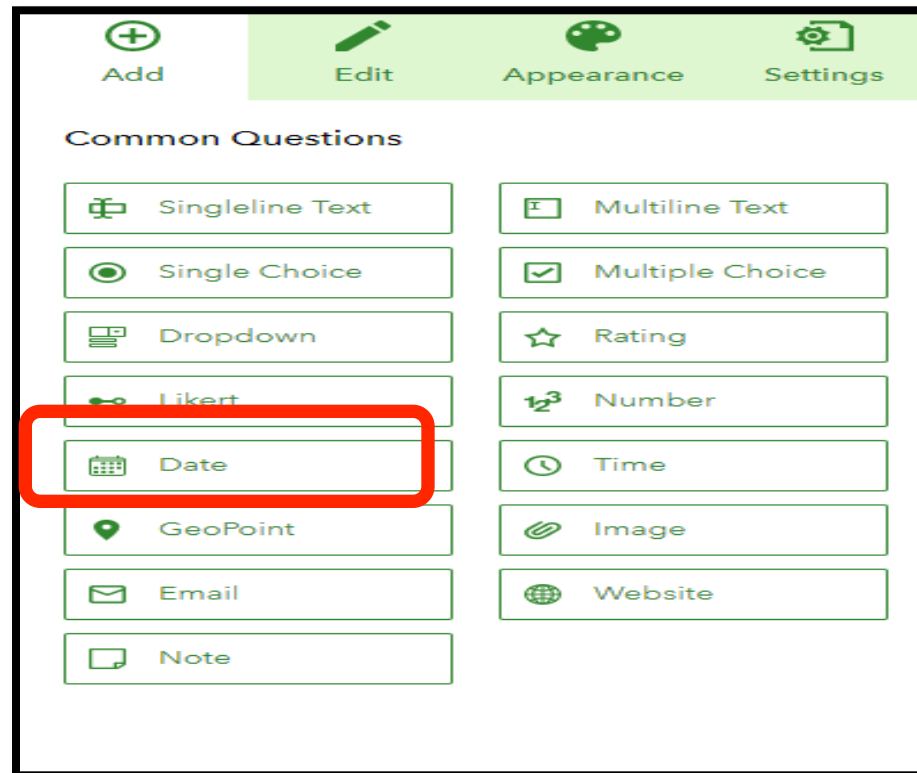
- Singleline Text
- Multiline Text
- Single Choice
- Multiple Choice
- Dropdown
- Rating
- Likert
- Number
- Date
- Time
- GeoPoint
- Image
- Email
- Website
- Note

ESRI : Survey123 for ArcGIS

Suggested Questions to Be Surveyed

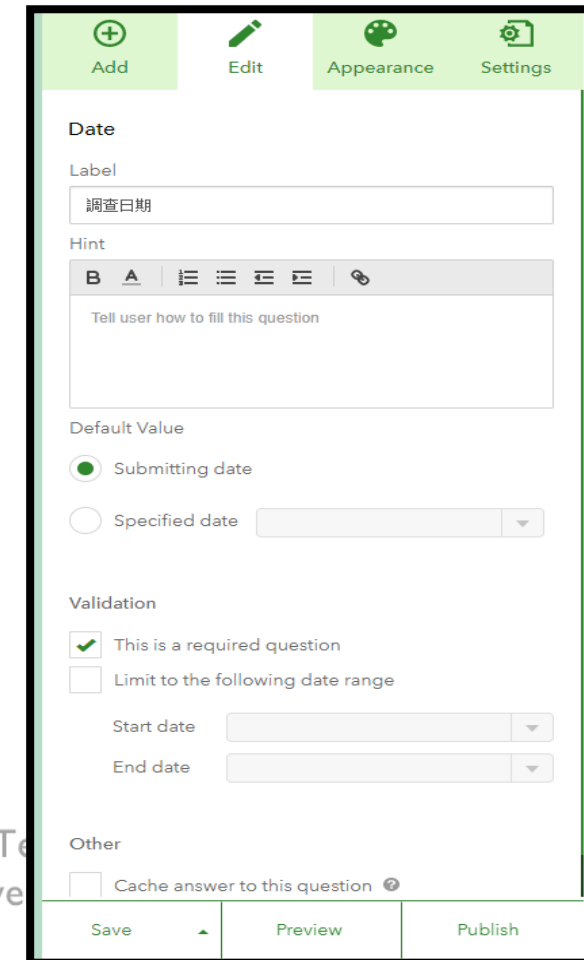
Question 1: Date of Survey

- 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.



ESRI : Survey123 for ArcGIS

- 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”

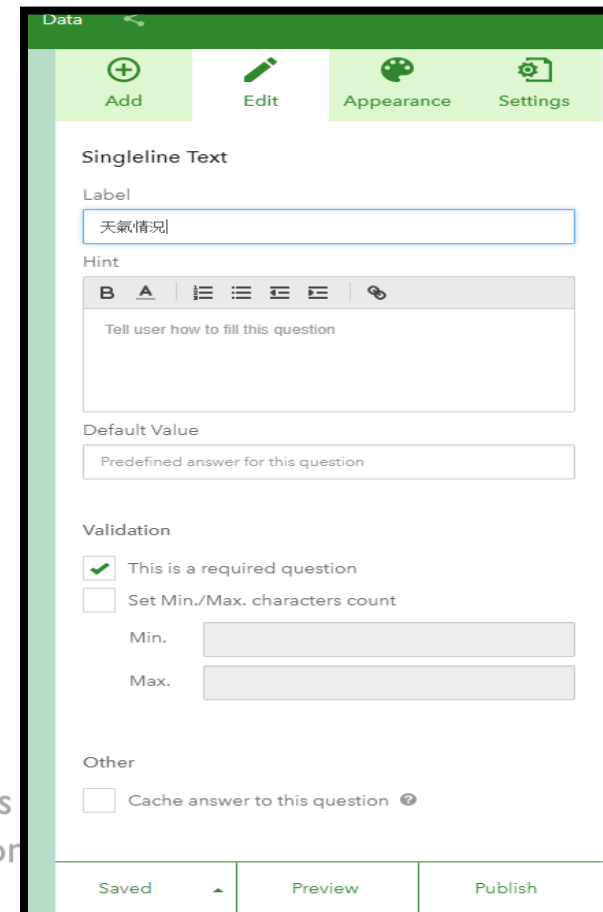
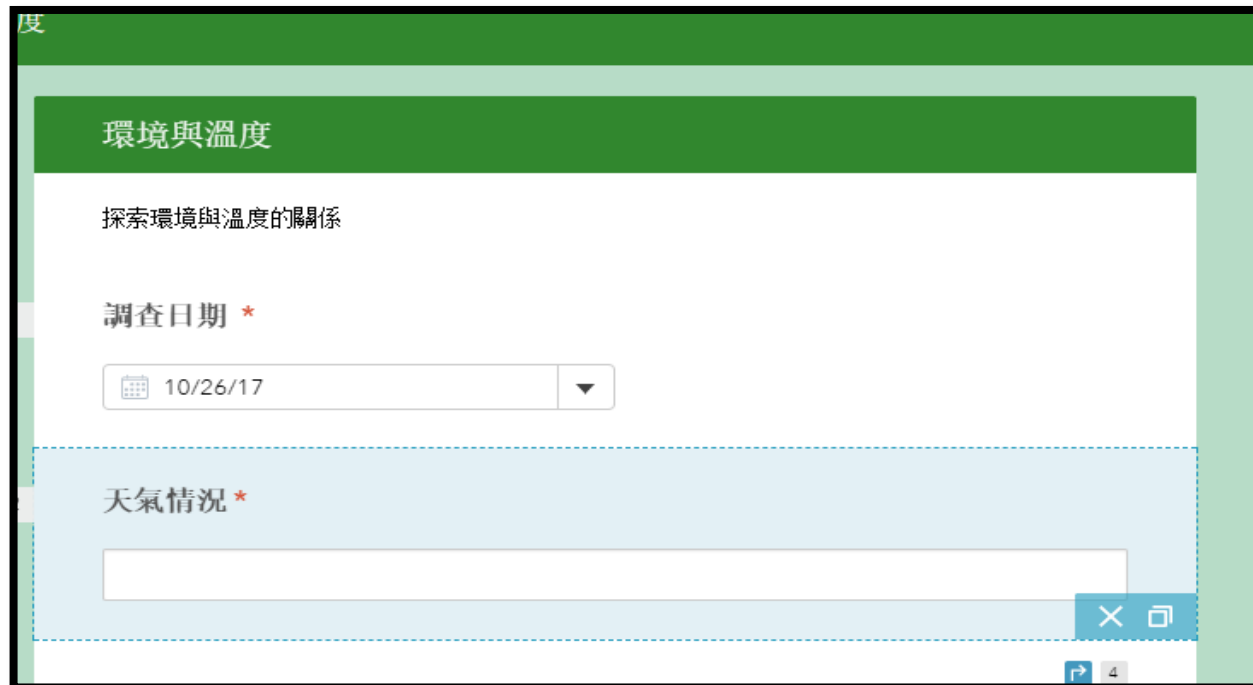


ESRI : Survey123 for ArcGIS

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.

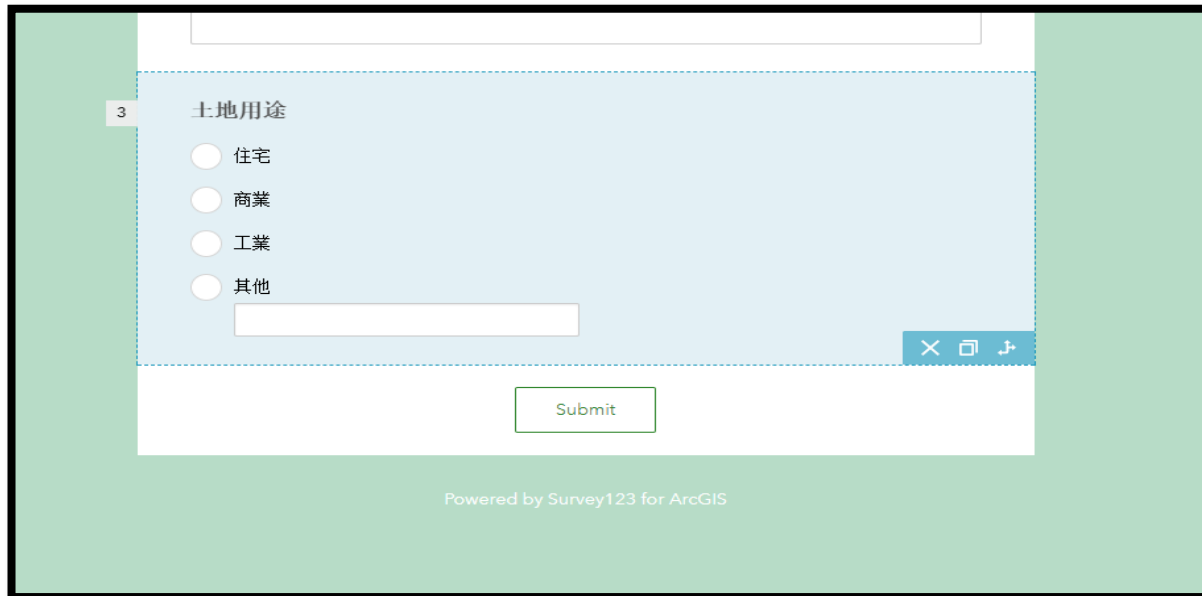


ESRI : Survey123 for ArcGIS

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

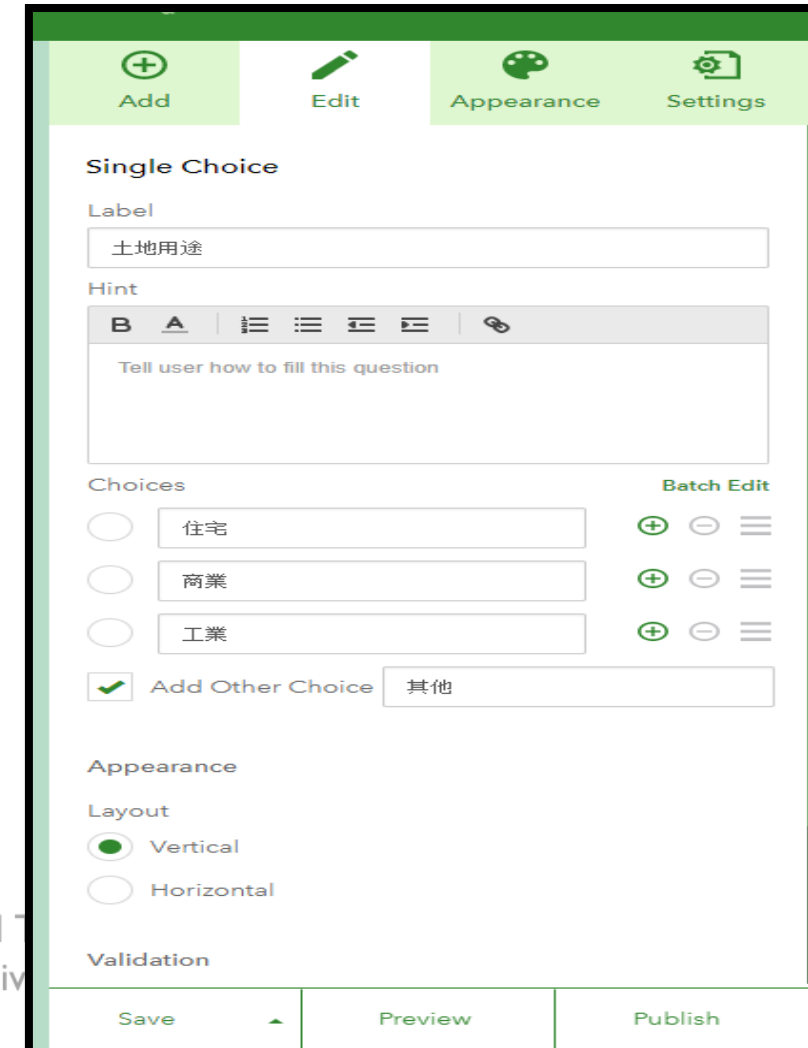
☐ 商業

☐ 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

☐ 住宅

☐ 商業

☐ 工業

☒ Add Other Choice 其他

Appearance

Layout
☒ Vertical
☐ Horizontal

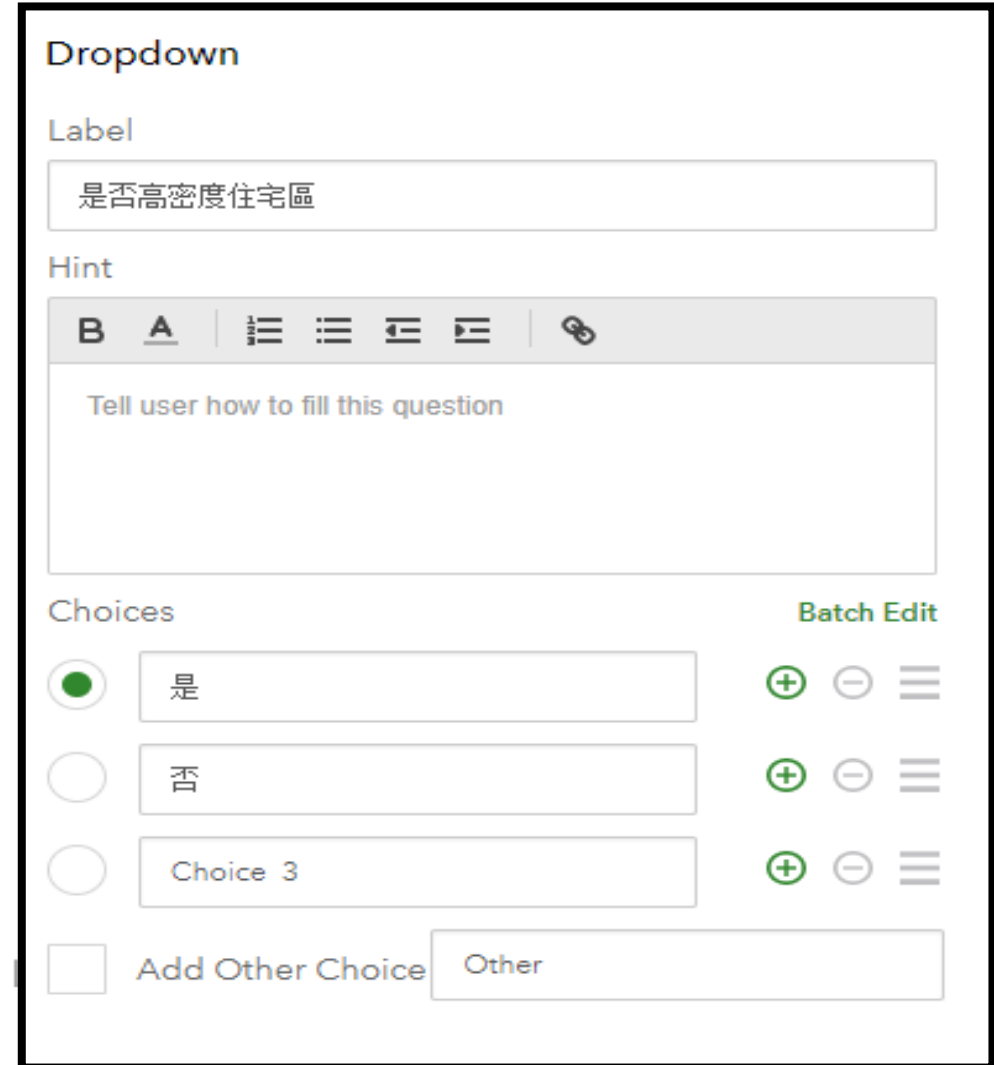
Validation

Save Preview Publish

ESRI : Survey123 for ArcGIS

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.



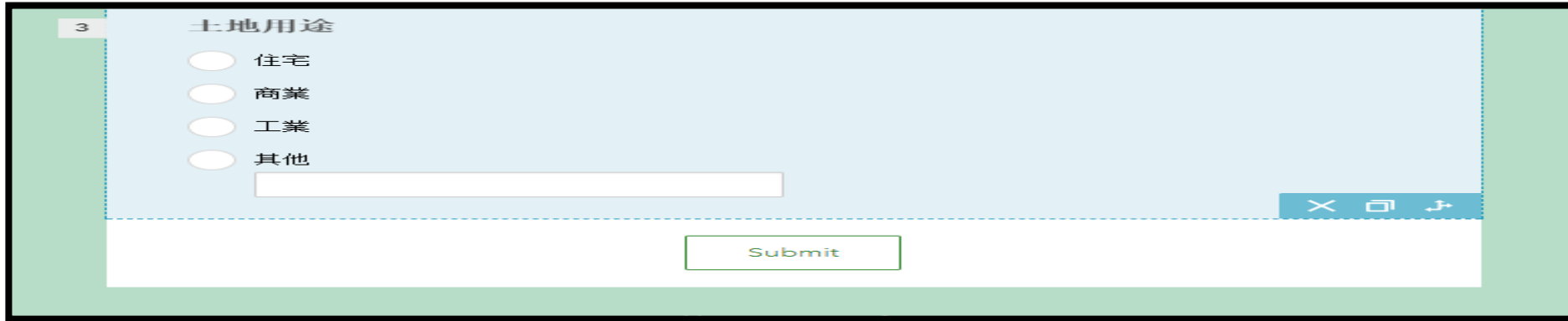
The screenshot shows the configuration interface for a 'Dropdown' question in Survey123. The interface includes a 'Label' field with the text '是否高密度住宅區', a 'Hint' field with the text 'Tell user how to fill this question', and a 'Choices' section. The 'Choices' section contains three rows: '是' (selected with a green radio button), '否', and 'Choice 3'. Each row has a green '+' button, a grey '-' button, and a grey menu icon. At the bottom, there is an 'Add Other Choice' button and an 'Other' text input field. The 'Batch Edit' link is visible in the top right of the choices section.

ESRI : Survey123 for ArcGIS


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.

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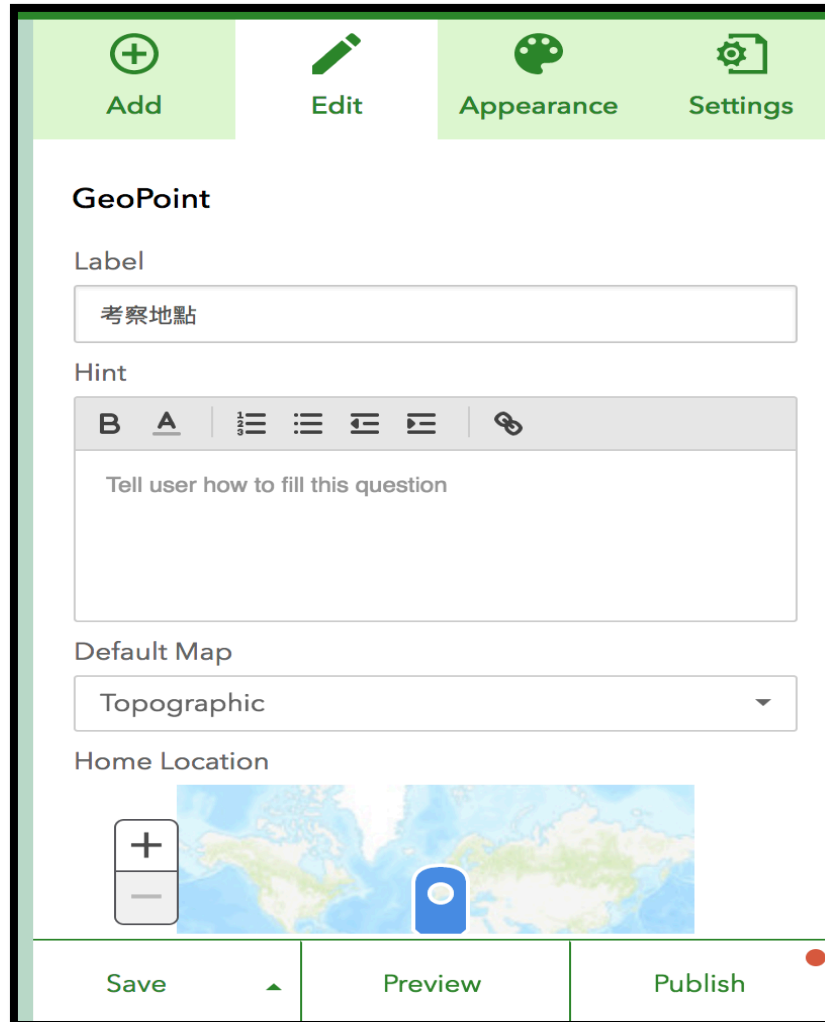


Then the **Set Rule** pop-up will appear. Now under the **IF** dropdown, select “住宅”. Then in the SHOW dropdown, select “是否高密度住宅區”.



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Question 5: GeoPoint

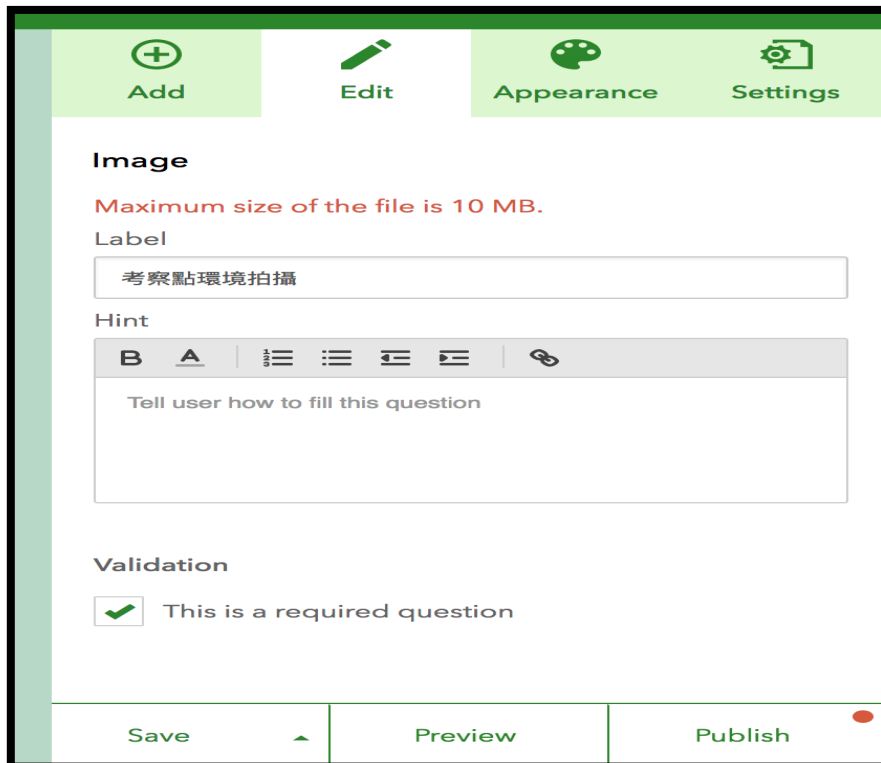


The screenshot shows the configuration interface for a 'GeoPoint' question in Survey123. The interface has a top navigation bar with four tabs: 'Add' (with a plus icon), 'Edit' (with a pencil icon), 'Appearance' (with a palette icon), and 'Settings' (with a gear icon). The 'Add' tab is currently selected. Below the tabs, the question title 'GeoPoint' is displayed. The 'Label' field contains the text '考察地點'. The 'Hint' field contains the text 'Tell user how to fill this question' and includes a rich text editor toolbar with icons for bold, italic, bulleted list, numbered list, link, and unlink. The 'Default Map' dropdown menu is set to 'Topographic'. The 'Home Location' section features a map of the world with a blue location pin over North America and zoom controls (plus and minus buttons). At the bottom, there are three buttons: 'Save', 'Preview', and 'Publish'.

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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.

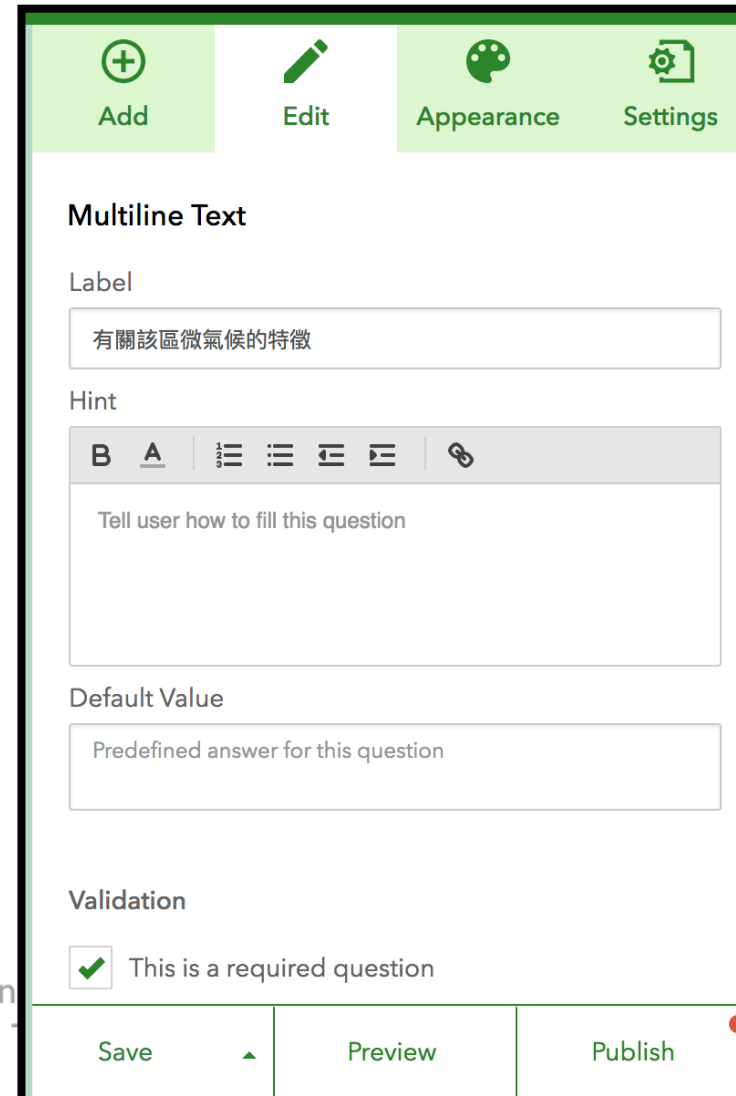


The screenshot shows the 'Add' panel in the Survey123 interface. At the top, there are four tabs: 'Add' (selected), 'Edit', 'Appearance', and 'Settings'. Below the tabs, the 'Image' section is active, displaying a red warning message: 'Maximum size of the file is 10 MB.' Below this, there is a 'Label' field containing the text '考察點環境拍攝'. Underneath the label field is a 'Hint' section with a rich text editor toolbar (bold, italic, bulleted list, numbered list, link, unlink) and a text area containing the placeholder text 'Tell user how to fill this question'. Below the hint section is a 'Validation' section with a checked checkbox and the text 'This is a required question'. At the bottom of the panel, there are three buttons: 'Save', 'Preview', and 'Publish'.

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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.

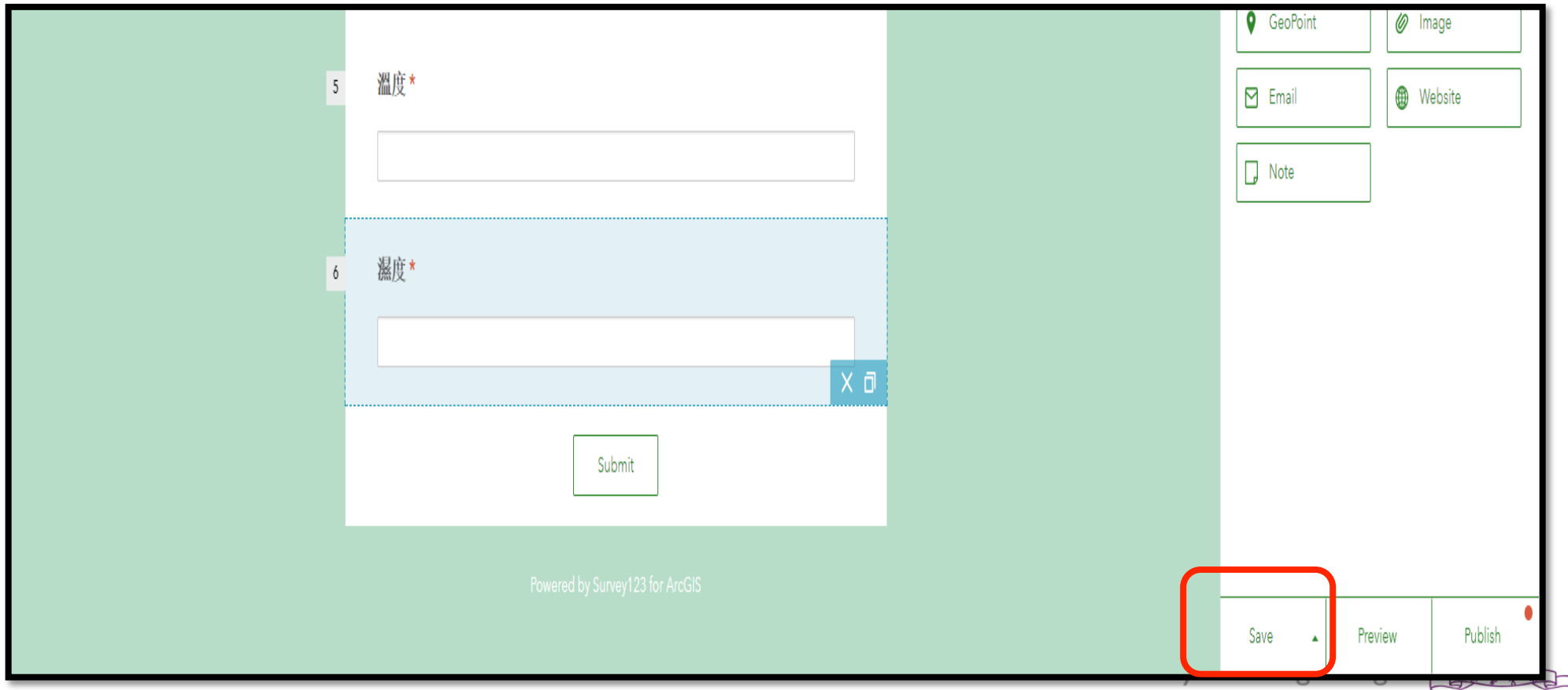


The screenshot shows the 'Edit' panel for a 'Multiline Text' question in Survey123. The panel has a green header with four tabs: 'Add' (plus icon), 'Edit' (pencil icon), 'Appearance' (palette icon), and 'Settings' (gear icon). The 'Edit' tab is active. Below the header, the question type is 'Multiline Text'. There are three main input fields: 'Label' (containing '有關該區微氣候的特徵'), 'Hint' (containing 'Tell user how to fill this question'), and 'Default Value' (containing 'Predefined answer for this question'). The 'Hint' field has a rich text editor toolbar with icons for bold, italic, bulleted list, numbered list, link, and unlink. At the bottom, there is a 'Validation' section with a checked checkbox and the text 'This is a required question'. The panel ends with three buttons: 'Save', 'Preview', and 'Publish'.

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Save the Project : Survey123 for ArcGIS Guideline

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



The screenshot displays the Survey123 for ArcGIS interface. It features a form with two questions, both labeled "溫度*" (Temperature*). The first question is numbered 5 and has a text input field. The second question is numbered 6 and also has a text input field. Below the questions is a "Submit" button. On the right side, there are several tool buttons: "GeoPoint", "Image", "Email", "Website", and "Note". At the bottom right, there is a navigation bar with three buttons: "Save", "Preview", and "Publish". The "Save" button is highlighted with a red rectangle. The text "Powered by Survey123 for ArcGIS" is visible at the bottom center of the form area.

ESRI : Survey123 for ArcGIS

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.



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Share the Project : Survey123 for ArcGIS Guideline

- Share to Group
- Share via web link

ESRI : Survey123 for ArcGIS

Share the Project : Survey123 for ArcGIS Guideline

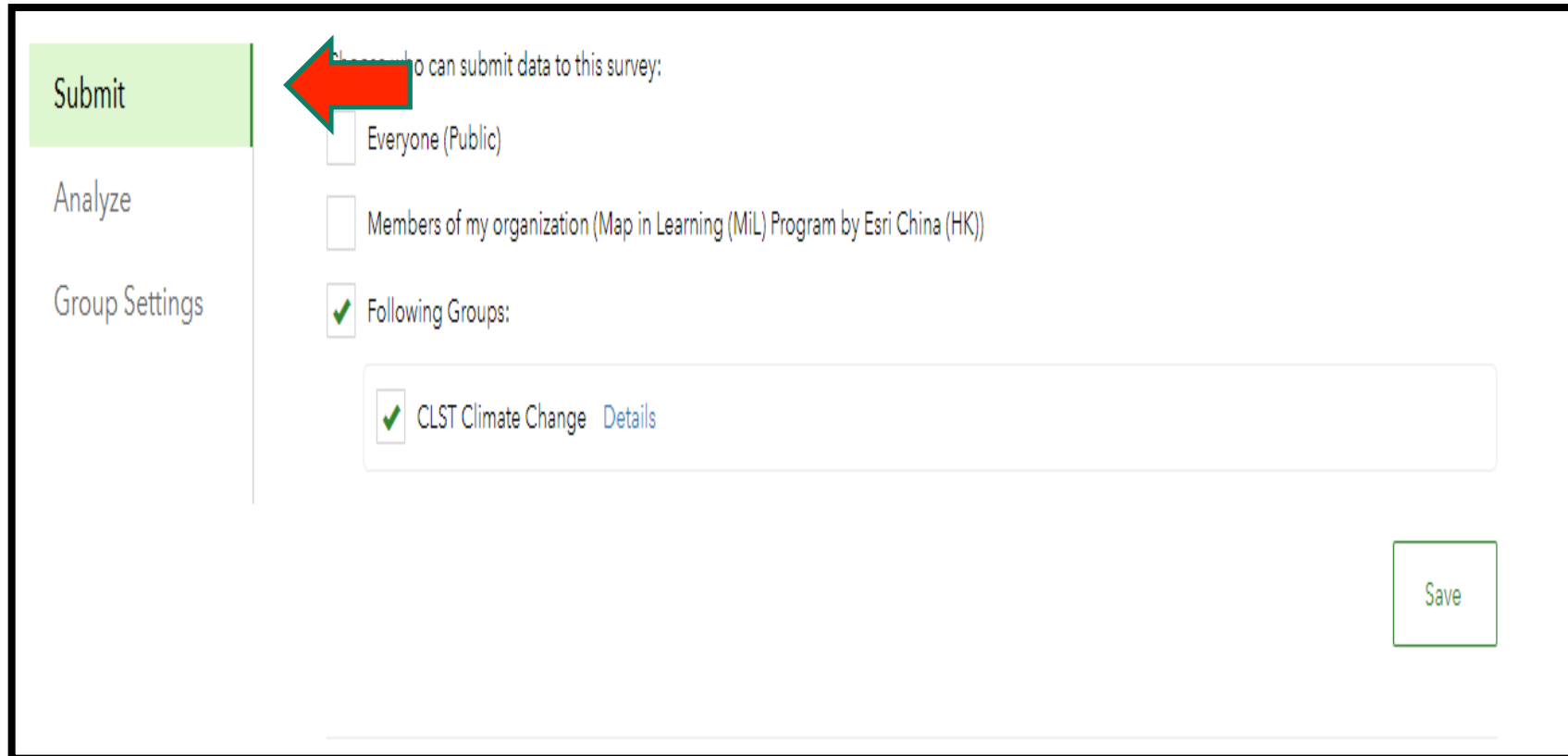
Share to Group

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.

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Share the Project : Survey123 for ArcGIS Guideline



Submit

Analyze

Group Settings

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](#)

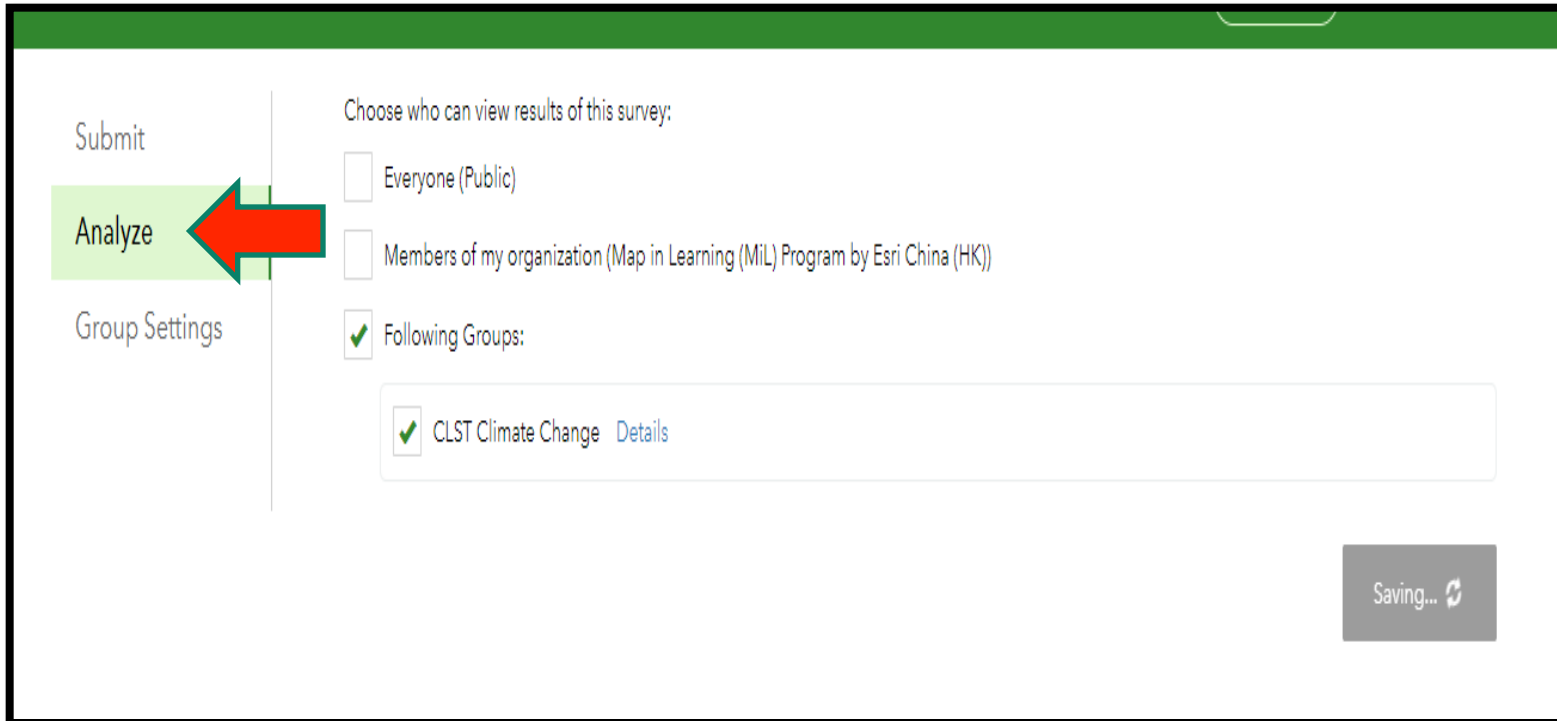
Save



ESRI : Survey123 for ArcGIS

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.



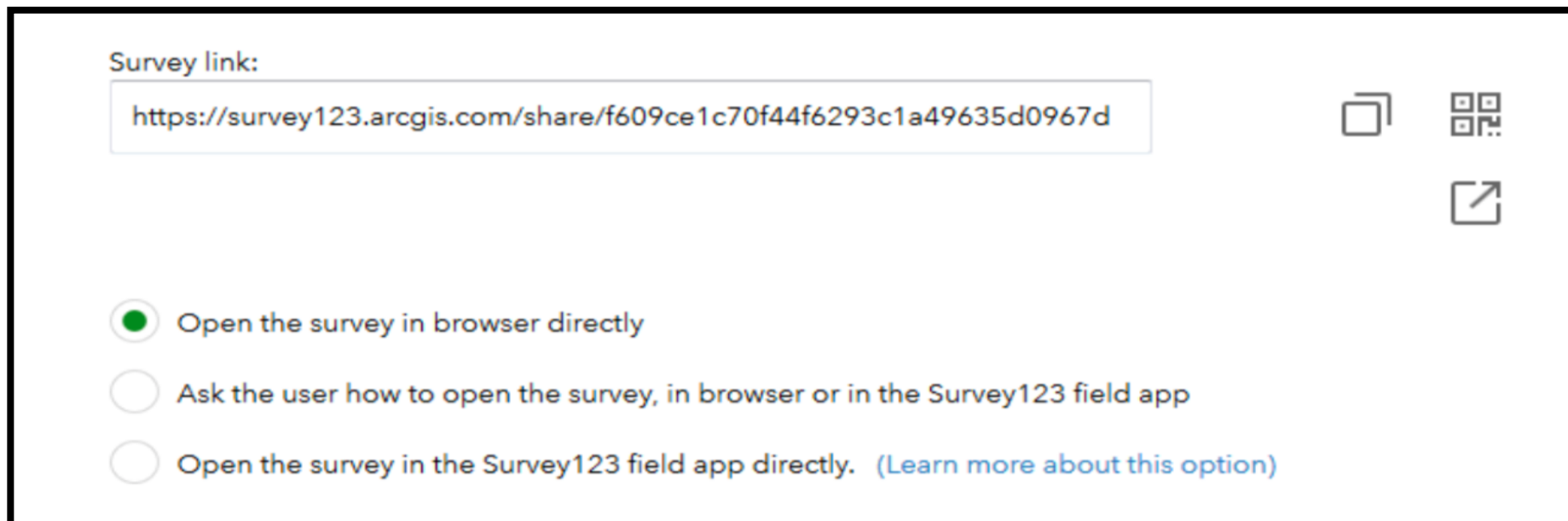
The screenshot shows the 'Collaborate' section of the Survey123 interface. On the left, there are three buttons: 'Submit', 'Analyze', and 'Group Settings'. The 'Analyze' button is highlighted with a green background and a red arrow pointing to it. To the right of these buttons, there is a section titled 'Choose who can view results of this survey:'. This section contains three options: 'Everyone (Public)', 'Members of my organization (Map in Learning (MiL) Program by Esri China (HK))', and 'Following Groups:'. The 'Following Groups:' option is selected with a green checkmark. Below this, there is a list of groups, with 'CLST Climate Change' selected and a 'Details' link next to it. At the bottom right, there is a 'Saving...' button with a circular arrow icon.



ESRI : Survey123 for ArcGIS

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.



The screenshot shows the 'Survey link:' section of the Survey123 interface. It features a text box containing the URL `https://survey123.arcgis.com/share/f609ce1c70f44f6293c1a49635d0967d`. To the right of the text box are three icons: a copy icon, a QR code icon, and a share icon. Below the text box are three radio button options: 'Open the survey in browser directly' (which is selected), 'Ask the user how to open the survey, in browser or in the Survey123 field app', and 'Open the survey in the Survey123 field app directly. (Learn more about this option)'.



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Accessing the Project : Survey123 for ArcGIS Guideline

- Web Link
- Dedicated App

ESRI : Survey123 for ArcGIS

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

ESRI : Survey123 for ArcGIS

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

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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

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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.

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Submitting the Project : Survey123 for ArcGIS Guideline

Doing the Survey with Mobile Apps

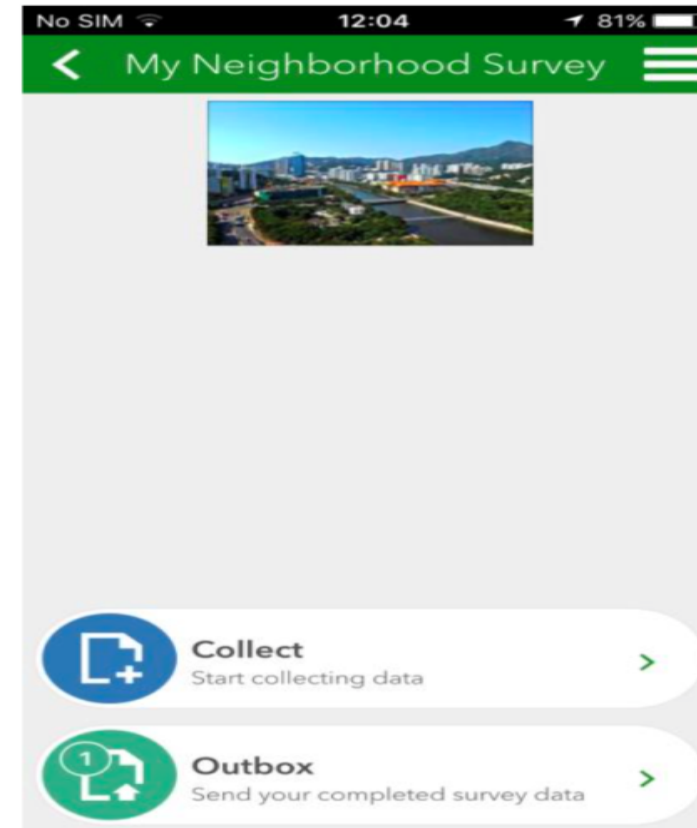
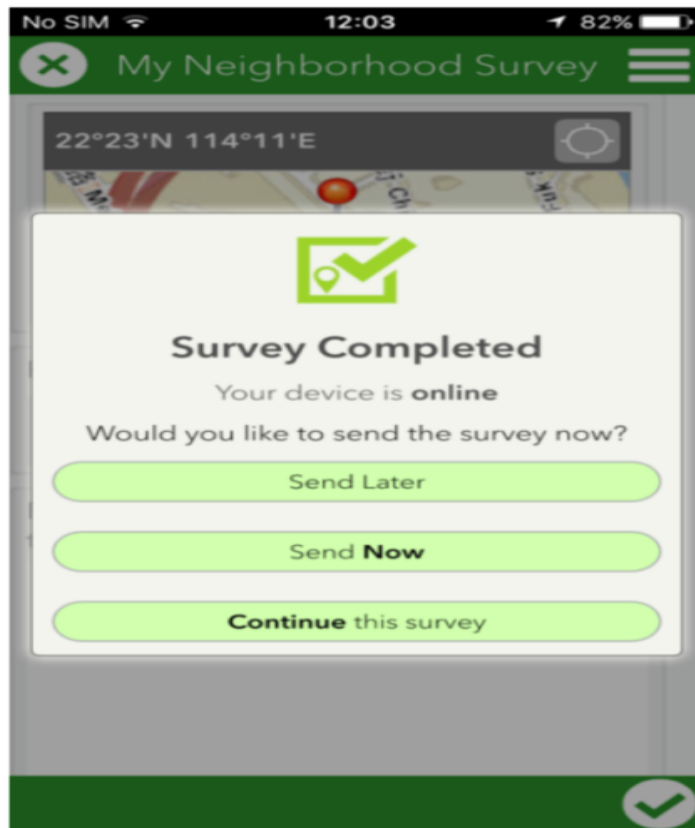
In using Survey123 app on mobile platform like iOS and Android, students can save a draft survey record on their phone, and continue work on it before submitting the record to ArcGIS Online.

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.

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Submitting the Project : Survey123 for ArcGIS Guideline Doing the Survey with Mobile Apps



ESRI : Survey123 for ArcGIS

Understanding Your Data

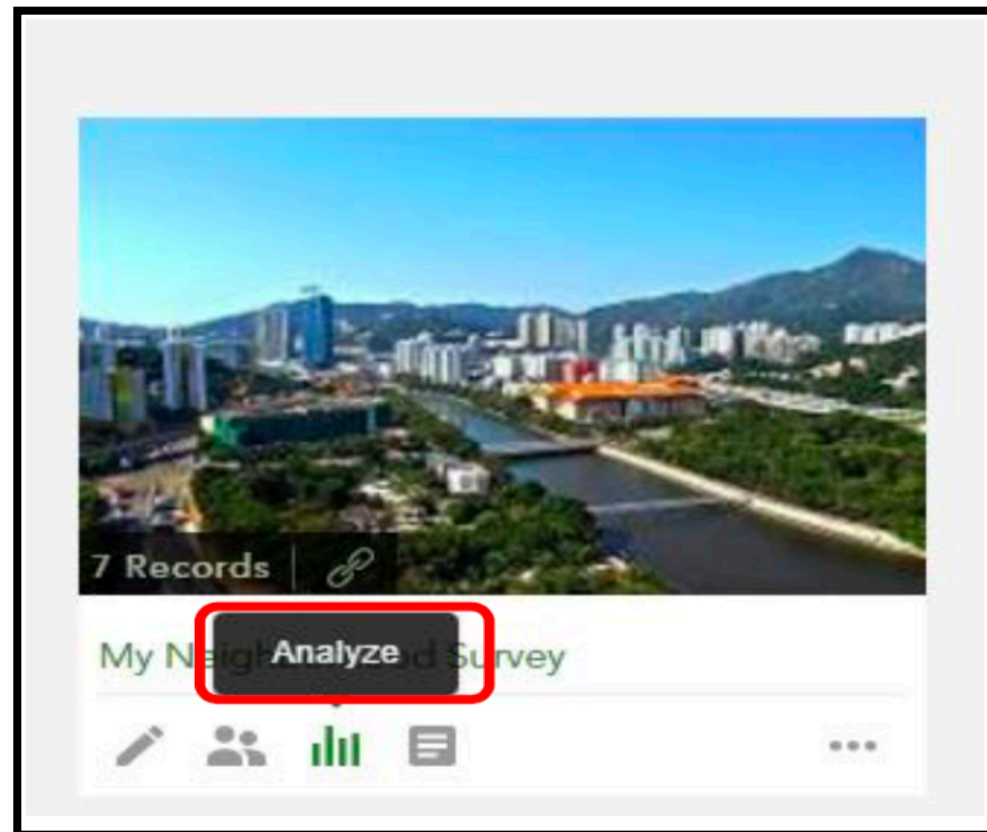
- Teachers and students can easily **see the result** for each question in the form of charts, tables or map (options will be varied depending on the type of questions) with the **Analyze function** of Survey123.
- Currently, this function is available on **web version** (survey123.arcgis.com) only.

ESRI : Survey123 for ArcGIS

Understanding Your Data

Teachers

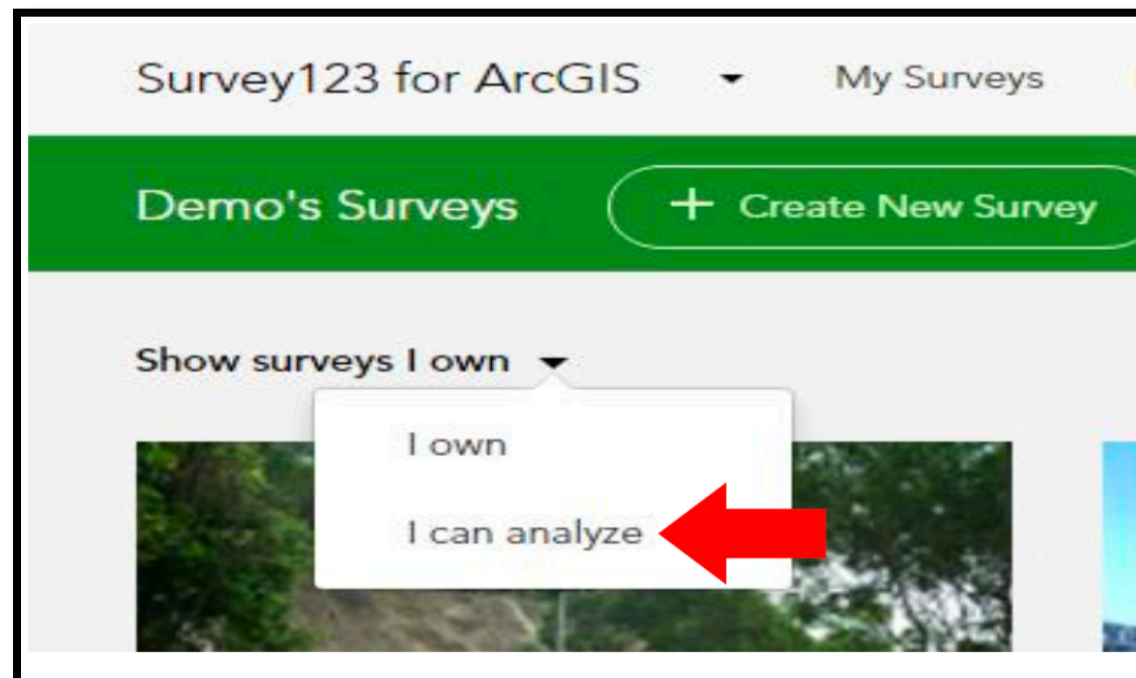
After click the **Analyze** button under the thumbnail of your survey to view the result.



ESRI : Survey123 for ArcGIS

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.



ESRI : Survey123 for ArcGIS

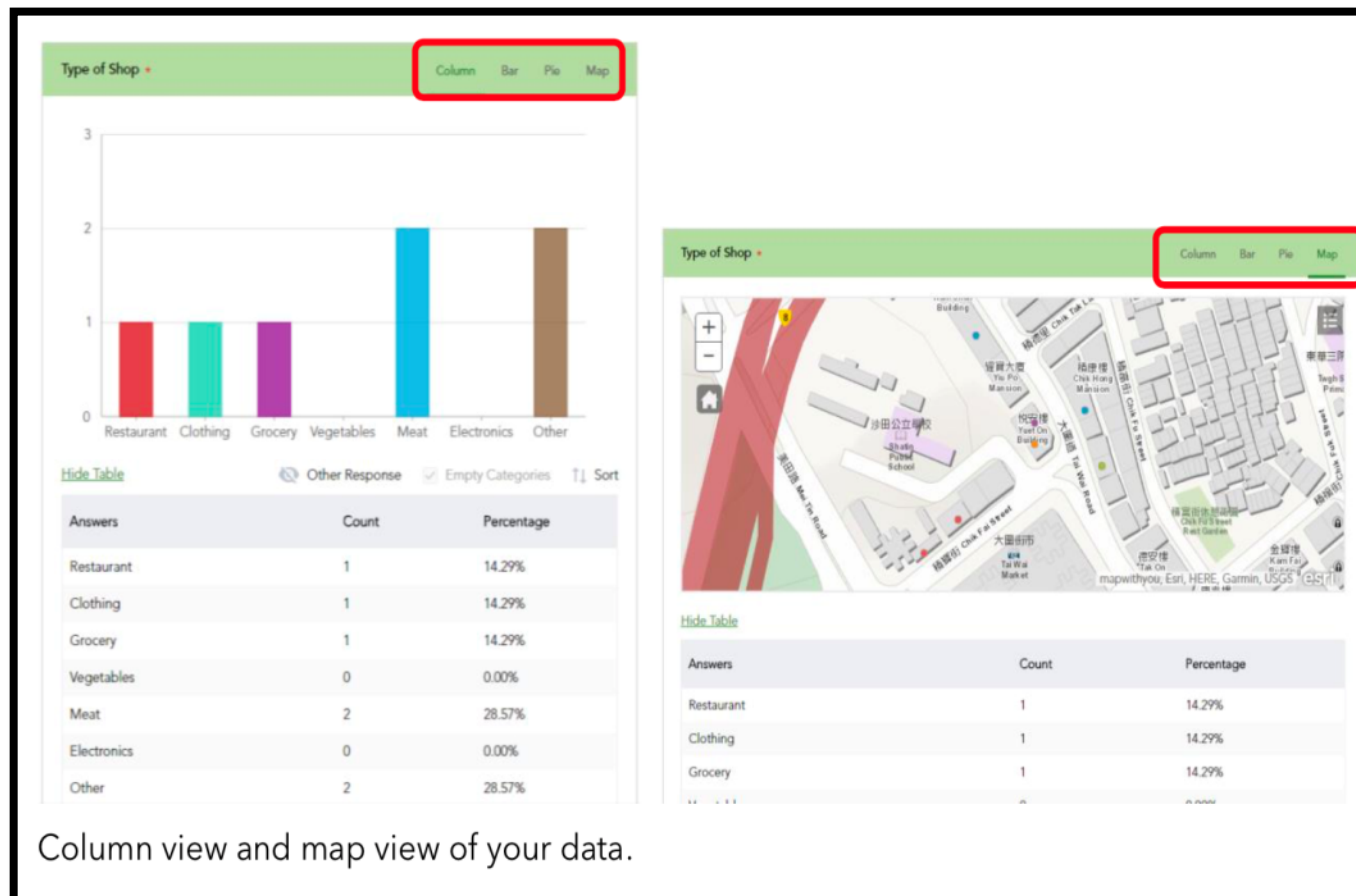
Understanding Your Data

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._

ESRI : Survey123 for ArcGIS

Understanding Your Data Viewing Your Result for Each Questions



Column view and map view of your data.

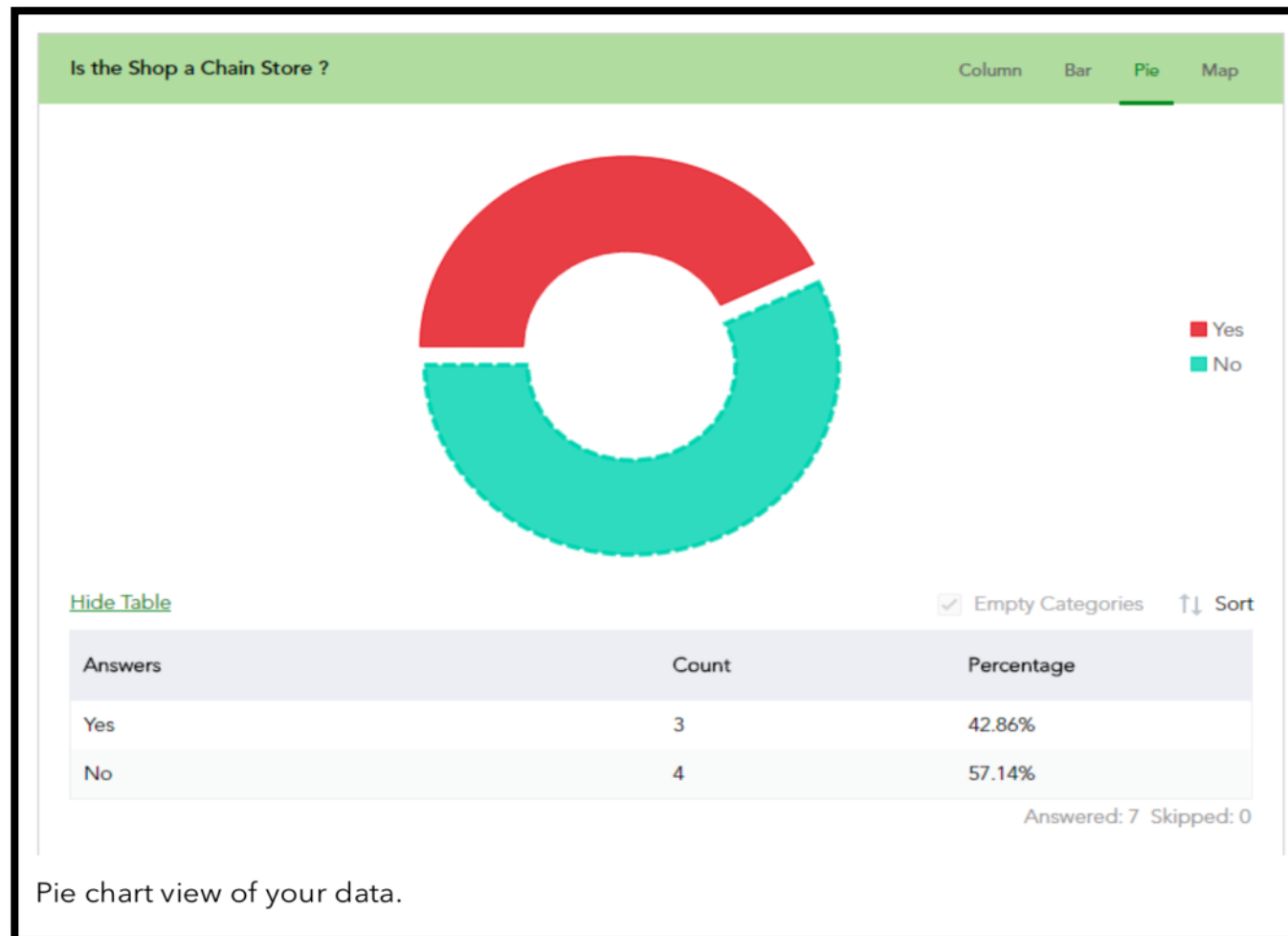
Technologies (CLST)
City of Hong Kong



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Understanding Your Data

Viewing Your Result for Each Questions



ESRI : Survey123 for ArcGIS

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.

ESRI : Survey123 for ArcGIS

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.

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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:
Feb 16,2017	ABC Clothing	Clothing		McDonald's	02/16/2017 12:07:46
Feb 16,2017	Tai Wai Pharmacy	Other		Type of Shop	<div>Print Current Response</div>
Feb 16,2017	Hang Seng Bank	Other		Restaurant	
Feb 16,2017	Fai Kei	Meat		Is the Shop a Chain Store ?	
				Yes	

Download

02/16/2017 - 02/16/2017

Legend

Type of Shops

- Meat
- Other
- Clothing
- Grocery
- Restaurant
- Electronics
- Vegetables



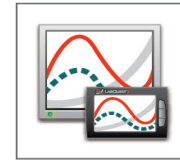
3. 介紹用於環境調查的電子傳感器和可編程設備

3. 介紹用於環境調查的電子傳感器和可編程設備

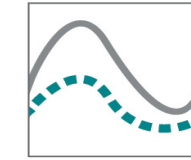


DATA LOGGER:
LABQUEST

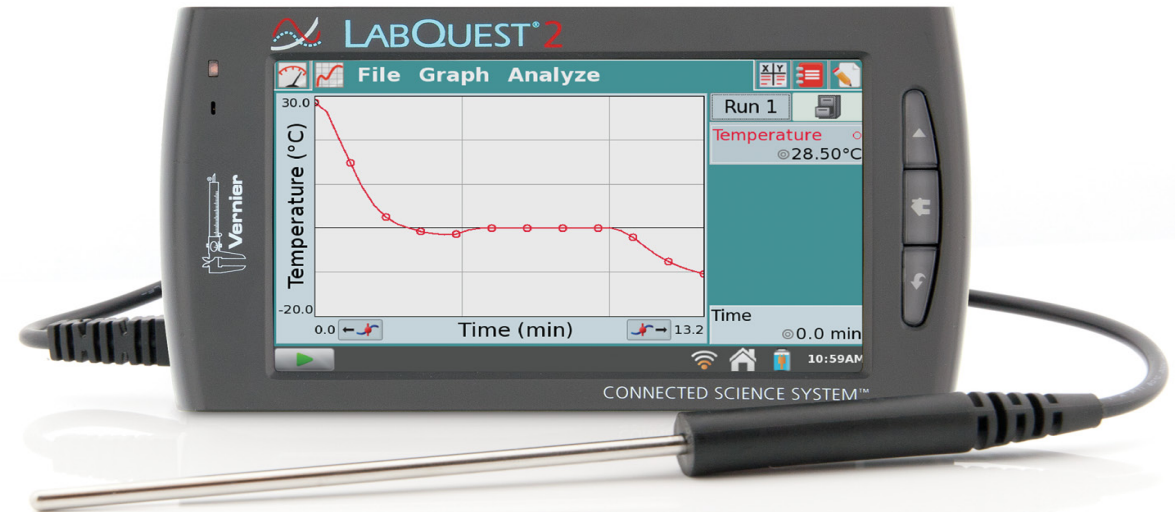
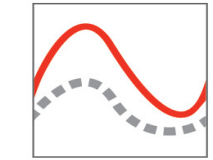
LABQUEST
VIEWER



VERNIER DATA
SHARE WEB APP



GRAPHICAL
ANALYSIS for iPad



Centre f

3.介紹用於環境調查的電子傳感器和可編程設備



DATA SENSOR:
TEMPERATURE



DATA SENSOR:
HUMIDITY

3.介紹用於環境調查的電子傳感器和可編程設備



DATA SENSOR:
Sound Level Meter



DATA SENSOR:
Sound Level Meter

3.介紹用於環境調查的電子傳感器和可編程設備

DATA SENSOR:
WIND SPEED



3.介紹用於環境調查的電子傳感器和可編程設備

DATA SENSOR:
FORCE SENSOR



3.介紹用於環境調查的電子傳感器和可編程設備

DATA SENSOR:
WATER FLOW RATE



3.介紹用於環境調查的電子傳感器和可編程設備

DATA SENSOR:
SALINITY



4. 不同科目運用移動學習的教學案例的討論

Discussion of Example of adopting EduVenture in different KLAs

- **Main KLAs examples**
Liberal Studies, Chinese/English Languages, Geography and Science
- **Expected learning Outcomes related to IBL**
Social Inquiry, Scientific Inquiry
- **Outdoor learning orientation**
Self-directed, inquiry-based, student- centred, adventurous, gamified learning experience
- **Teachers' role**
As facilitator and motivator

Discussion of Example of adopting EduVenture in different KLAs

1. Discussion on secondary school specific outdoor learning activity design and implementation;
2. How to cater for students' individual differences (learning speed, learning preference, motivation etc.).
3. Student grouping and mobile device allocation

5. 賬戶管理和設備的安排

5. 賬戶管理和設備的安排

Account Management and Logistics Measures

- Purpose of the **school key** and the role of **teacher accounts**;
- iPad activation by school key;
- **School key application** in EduVenture Composer and EduVenture Retriever;

6. 介紹移動學習活動的替代方案

6. 介紹移動學習活動的替代方案

Alternative systems for outdoor learning:

- Windows/Android/Web-Based;
- Non-GPS outdoor learning (QR-Code, Virtual-reality, Augmented-reality) and their pros and cons;
- Discussion of free Wi-Fi in Hong Kong and the feasibility of A-GPS;
- Personal hotspot cellular networks and sharing of location services through mobile devices;
- Resources provided by EDB

7. 課程總結



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

聯絡

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