

Simple apps for fieldwork

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Most of our students these days bring a phone to class - how can we utilise them in Geography? Here are two basic starting points for you to try, with no training or prep required, to store fieldwork findings in a useful and engaging way. For more advanced functionality check out apps such as Epicollect5.

SIMPLE LOGGER APP



What does the app do?

Simple Logger records a simple path taken during fieldwork. It allows for observational data to be recorded against usable latitude and longitude coordinates. This fieldwork data can then be exported into Google My Maps or Google Earth. It also provides an elevation profile along a path as well as recording information such as time, distance, average speed and highest/lowest elevation.

How is the app useful in teaching and learning Geography?

- Simple Logger is useful for plotting notes at various points along a path during fieldwork.
- Notes can be measurements such as water quality testing results (e.g. pH, turbidity or phosphate levels), species identification (e.g. tree/shrub types) or general observations (e.g. features of liveability, management strategies, evidence of erosion/deposition, litter type)
- The simple nature of this app allows for easy use in a lesson with teacher instruction, or an independent fieldwork task (such as a Research Action Plan or Senior Geography Project).

Instructions for using SimpleLogger:

1. Download "SimpleLogger" app from app store (free).
2. Press "Launch Logger" to start logging data/photos.
3. Press "REC" and start your fieldwork. Ensure your location settings are turned on. Along the path you can add an image (camera icon 📷) or notes (waypoint icon 📍). You can pause the recording at any point and restart again.
4. Once you have collected data, you can press the save button (disk icon 💾). The data is saved and can be viewed in the app ("View Files" on app home page).
5. The data can also be saved in GPX or KML format and then shared or emailed to your laptop or PC where you can export the data to Google My Maps (<https://www.google.com/maps/d/>) or Google Earth to create a new map. Data can also be stored using iCloud (click on **i** icon on app home page).

SPATIAL TECHNOLOGIES: FIELDWORK

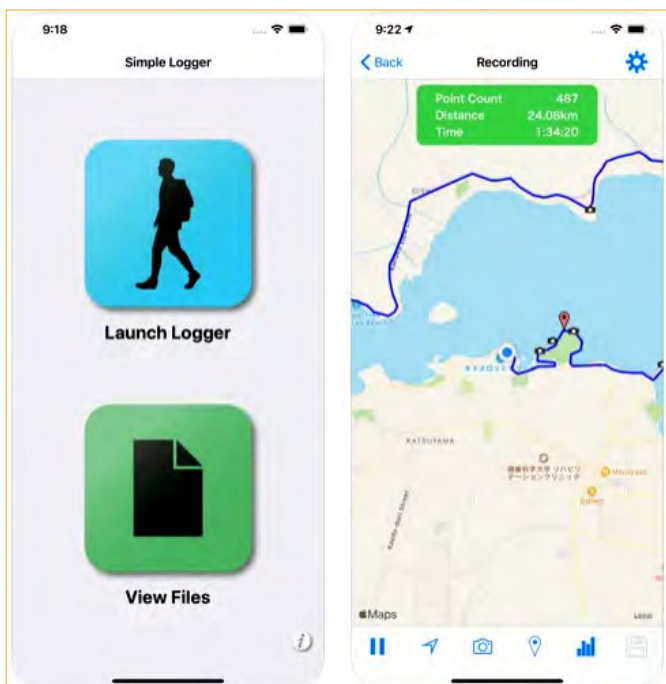
Simple Logger – Benefits and limitation

Benefits

- Simple and easy to use
- Good introduction to GIS and spatial technologies
- Easily plots notes and photos on a map
- Provides elevation, speed, distance data.
- Can export as a GPX or KML file (text only)
- Free app
- Small download size

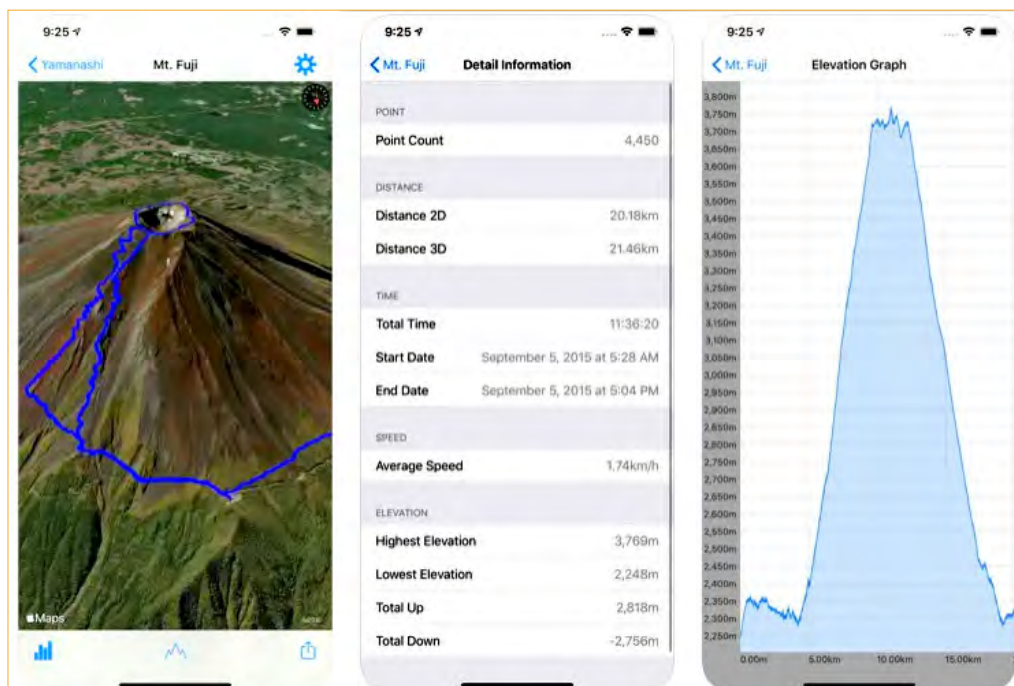
Limitations

- Limited in the functions it can perform
- Not available on Android devices.
- Students need to ensure location settings are on otherwise will not work
- iPhone/iPad device is required by student with enough storage to save files
- Images cannot be exported.
- Needs wifi or data to send exported data.



Left: preview of app homepage (image 1) and sample of recording a path (image 2).

Below: Preview of finished path (image 3), Detailed Information about path (image 4) and elevation Graph (image 5)



SPATIAL TECHNOLOGIES: FIELDWORK



Student Sample: Stage 5 Environmental Change and Management (Plotting observations of Management Strategies of a beach environment)

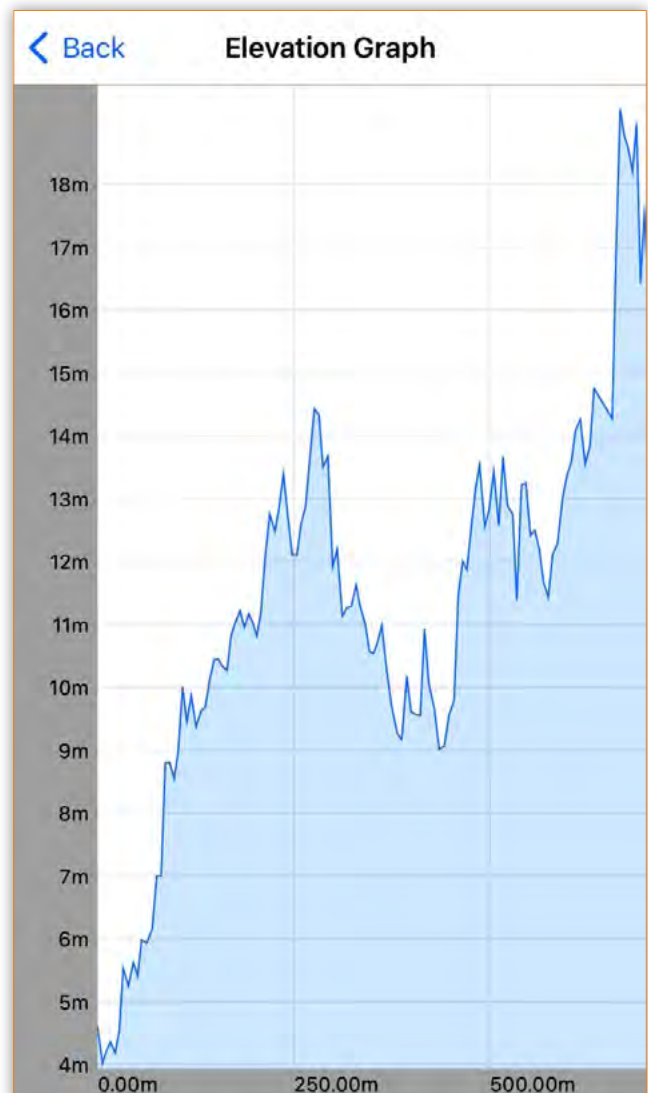
Task

Students walked around the fieldwork site using the app to take photos and notes of the various management strategies around the reserve. The app logged the route as well as notes and photos.

Student Sample: Stage 4 Landscapes and Landforms: Creating an elevation profile of the school grounds

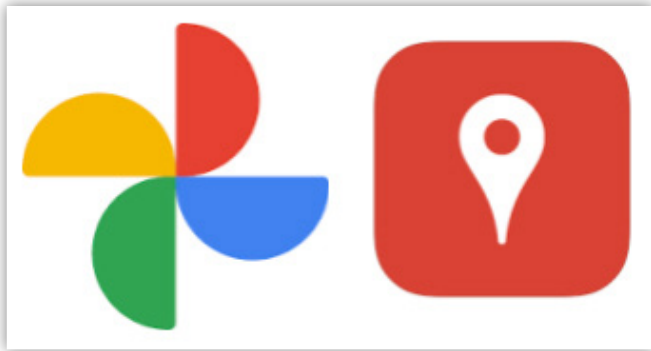
Task

Students discussed elements of the school landscape and predicted the terrain (steep and gentle slopes) around the school site. Students then walked to various corners of the school using the Simple Logger App. Back in the classroom, students compared the various elevations before looking at a topographic map/six maps with contour lines.



SPATIAL TECHNOLOGIES: FIELDWORK

PLOTTING GOOGLE PHOTOS ON A GOOGLE MY MAP



What can Google My Maps do?

Google My Maps (<https://www.google.com/maps/d/>) allows you to attach information (such as notes, data and photos) to locations and create custom maps. Once you have created a map, it allows you to easily share or collaborate with others. The easiest way you can use Google My Maps post fieldwork is to take photos, save to Google Photos and allow Google My Maps to plot the photos on a map.

How is this useful in teaching and learning Geography?

- Images taken during fieldwork (as a class or individually) can be plotted on a custom map.
- Google My Maps allows you to share the map so your students can add their photos to the main map. Alternatively you can have a shared photo album and the teacher can import the images to the map.
- Plotting images can allow students to understand spatial components of a site as well as help them to identify clusters on a map (e.g. Where are the main clusters of A, B and C? How far away is the evidence of A from B?)

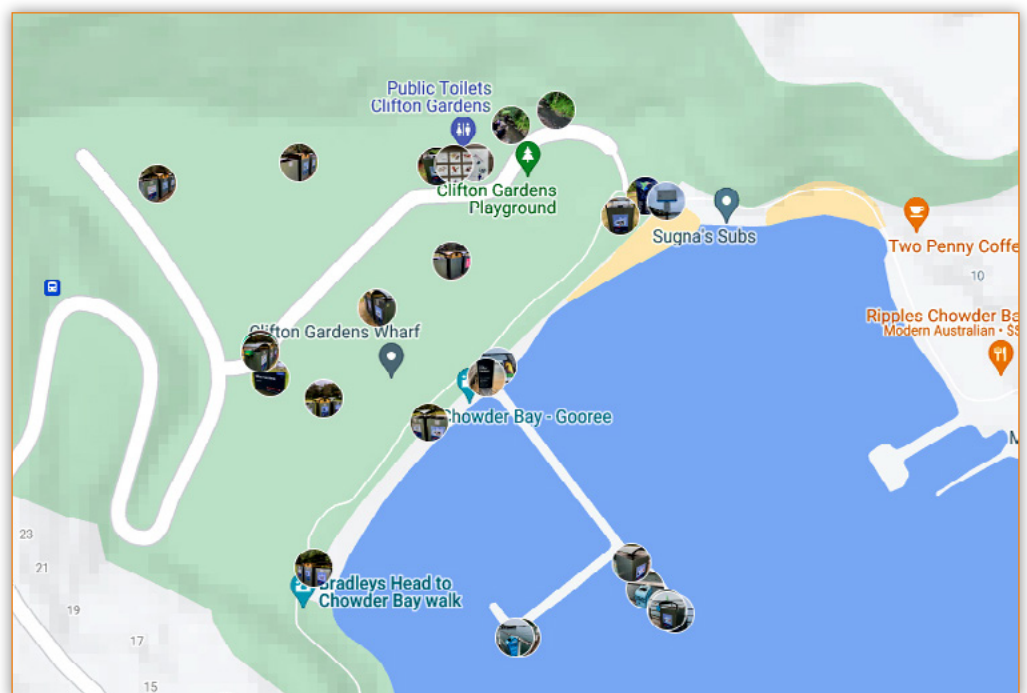
Benefits

- Simple and easy to use (only camera app required on phone)
- Good introduction to GIS and spatial technologies
- Easily plots photos on a map
- Text can be added once photos are plotted

Limitations

- Not all schools connected to Google suite
- Students need to ensure location settings on their phones
- Does not include route, elevation data, etc.

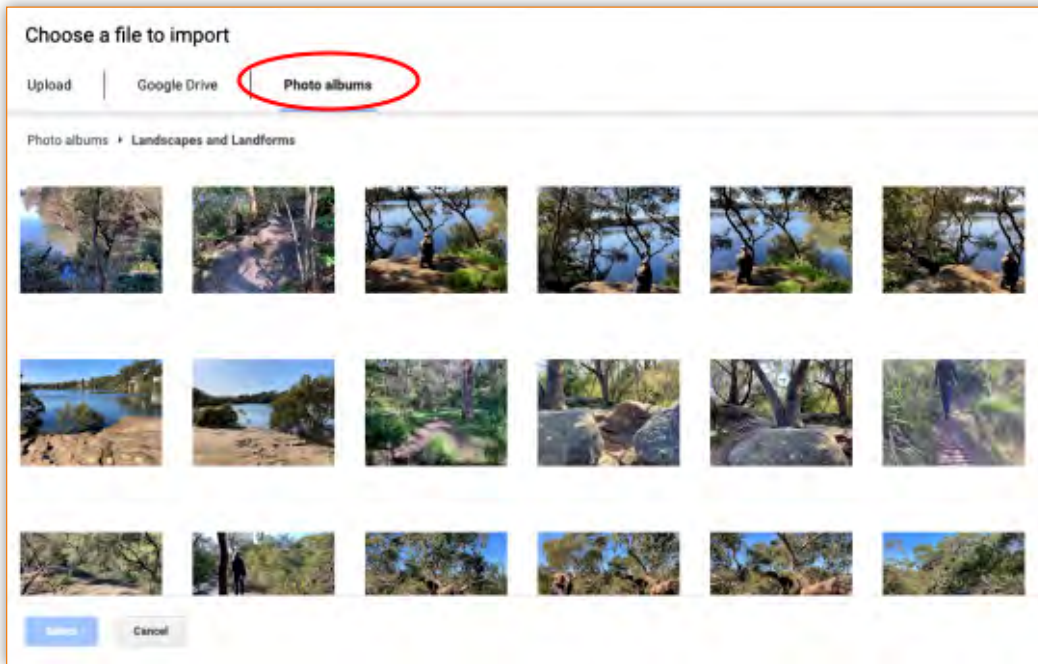
Student sample: Stage 5 Environmental Change and Management (Plotting observations of Management Strategies)



SPATIAL TECHNOLOGIES: FIELDWORK

Instructions for mapping photos on Google My Maps:

1. Take photos during fieldwork (ensure location settings are turned on).
2. Upload your images into a Google Photos album (<https://photos.google.com/>).
3. Open Google My Maps (<https://www.google.com/maps/d/>) and "create a new map". Name the map.
4. "Add Layer" then "Import" the images from the Google photo album (see below)
5. The images in the album will now be plotted on your map.
6. You can add text to each image by clicking on the image and then clicking edit.
7. The map can be shared by copying the link. Check the share settings before to ensure access is allowed.



Student Sample: Stage 4 Landscapes and landforms (Plotting observations of erosion, weathering and deposition)

