

Engaged Learning Project Idea

Title of Project: Mapping the Neighborhood!

Subject(s): Geography

Grade Level(s): 6th Grade

Abstract:

The Goal: To create an online walking trail map of the Garden Hills area around Atlanta International School

The Role: Students – Product / Teacher – Facilitator

The Audience: The local Garden Hills Community

The Situation: Students will be presented with the problem that new families move into Garden Hills all the time. They need a walking map to navigate to important places but also the map can feature a “Boot Camp” that want to use the map for an exercise protocol

The Product: Students will use Google Maps to create an online interactive map that they can share with the community from the school website. This should include original text, directions (from a field-visit walk of the area from which they will gather data), photographs and movie. The product will be in four different languages – French, German, Spanish and English – the languages through which Humanities is taught at Atlanta International School.

The Standards and Criteria for Assessment: Using the Criteria for Assessment (task specific rubric designed for the assignment) from the MYP Humanities Guide 2013 – Criterion B – Investigating, Criterion C – Thinking Critically and Criterion D – Communicating.

Learner Description/Context:

Learning will take place in a preparation planning class (students will look at Garden Hills and the surrounding areas using different types of map – paper, remote sensed, Google Earth, GIS) and learn map reading techniques that are important in map making (grid referencing, symbols, scale). They then will take the fieldtrip around the neighborhood in their class groups with their teacher in assigned collaborative groups of no more than four. This is an afternoon that will have to be a double block so will require planning in the master schedule and some administrative and parental input. Students should be given the opportunity to assign their own roles – the photographer – the note-taker (using tablets), use of the app “EveryTrail” to digitally map the route that they walk in real time for use later. There are lots of different things the students can look at – the diversity of housing, services, roads and sidewalks and amenities (pool, park and road calming for traffic). Students, on completion of the project, will share with the wider AIS community and the Garden Hills Homeowners Association through one of the Headmaster coffee mornings. Students will also learn about and position Geocaches in the local neighborhood and upload to the Geocaching Website. Some students live in the local area so will become “funds of knowledge” for those that do not live close by and only commute to the neighborhood. When splitting into collaborative groups, these students will become peer leaders.

Time Frame:

This will be a five-week unit of work, including taught component on mapping.

Week 1	Taught classes including the basic map reading skills that at student would need to understand the area maps both on paper and digitally Students learn what a Geocache is, how to put one together and start to design their group contribution
Week 2	Practice using Google Maps (see Appendix) and formative assessment using this medium on Criterion D Communicating Students practice creating Geocache and put together product and investigate where would be the best place to “hide” it
Week 3	Fieldtrip with collation and data from groups for individual work
Week 4	Collated data is placed into Google Maps
Week 5	Write up of project, turn in final online map with rubric for summative feedback on criteria and reflection

Standards Assessed:

The Standards and Criteria for Assessment: Using the Criteria for Assessment (task specific rubric designed for the assignment) from the MYP Humanities Guide 2013

Criterion B – Investigating (strands 2,3,4)

Engaged Learning Project Idea

Criterion C – Thinking Critically (strands 1,2,3,4)

Criterion D – Communicating (strands 1,2,3)

These will be in task specific rubrics. Outlines of the structured leveled assessment are included in the appendix. Stand Criterion B (i) will not be assessed as the question is already formulated for Year 1 students.

ISTE: 2.3: Authentic Learning: Candidate model and facilitate the use of digital tools and resources to engage students in authentic learning experiences. (PSC 2.3/ ISTE 2c)

3.1: Classroom Management and Collaborative Learning: Candidates model and facilitate effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources. (PSC 3.1/ISTE 3a)

Learner Objectives: Please see Appendix A – MYP Unit Planner

1. The “hook” or Introduction
Students will watch the movie “[Geography Matters](#)” and discuss the ideas behind the big picture of Geography and how we map the world and find where we are in the world.
2. Students do a “snowball” activity – where they write their questions on a piece of paper, throw them into the “snowball ring” on the floor at the front (this is a hula hoop!). Those who get into the ring are questions that we try to answer ourselves or using approaches to learning investigation or pin to the parking lot if we are unsure as to the answer at the end of the session time
3. Students are introduced in groups to different ways of finding their way around Atlanta – a historical map, a current paper map, a GPS and a Google Earth. Students are asked to list advantages and disadvantages of these medium.

Students then engage in learning about how to read these types of maps and in subsequent lessons, given mobile access to the Geocaching site to see if there are any caches in their home area.

Process:

Task	Students	Teacher	Assessment	Student direction
Map Skills	Learning skills from books, movie, ShowMe tutorials and maps skills games	Facilitator and Guide	Formative – Criterion C: Thinking Critically	Student rote learning
Geocaching	Website with discussion as to what to include and where to place	Facilitator and Guide	Formative – Criterion D: Communicating	Student design cycle and ideas in collaboration
Fieldtrip	Students collect primary data from field using pictures, measurements, Every Trail and Google Earth	Facilitator and Guide	Formative – Criterion B: Investigating, Criterion D: Communicating	Students in collaboration with peers in structured investigation
Collation of Data	Students share data in Google Doc	Facilitator and Guide	Formative – Criterion D: Communicating	Student collaboration
Design of Map	Students work individually with Google Maps	Facilitator and Guide	Summative – all criteria	Student follows rubric (task specific)
Assembly and placement of Geocache	Students work as a collaborative group to build, place and register Geocache	Facilitator and Guide	Formative – all criteria	

Product:

The end product will be an interactive Google map that the students create and link to the school website. The students will be able to use this map not only with their parents, the local community group but also with a visiting German exchange school when they visit the neighborhood next year. The students involved in that exchange program will be very engaged in that – especially when the language targets not only how they learn in Individuals and Societies (Humanities) but also enhances how they engage with the school in Dresden. Students on their visit will also be able to search for and find the Geocaches left by students on a tour of the local community.

Engaged Learning Project Idea

Technology Use:

Geocaching Website
 Google Docs
 Google Maps
 Google Earth
 EveryTrail
 Contour Education (http://www.youtube.com/watch?v=DF_yhDuoXQI)

References and Supporting Material:

Simon Ross – Basic Mapping Skills (See bibliography)
 Rubric as seen in Appendix
 Maps from Geological Society

Modifications made from feedback

Feedback included suggestion for geocache which has been added to the final project scope

Indicators of Engaged learning will be high in terms of a challenging project learning scope that will be standards based. Authentic, meaningful and student directed, the student roles are well supported as explorer and producer. Teacher roles of facilitator feature strongly. Collaborative nature high, with a good social interaction with performance based and generative summative assessment.

The LoTi level would be most certainly a 5 with the engagement of using the geocaching.

Appendix

MYP Unit Planner

Unit Title	Where in the World are we? Mapping the Neighborhood		
Teacher(s)	Stephenson, Colella, Darlis, Cardenas	MYP Year	1
Subject and discipline	Geography (Individuals and Societies	Unit duration (hours)	20

Stage 1: Establishing the purpose of the unit

Concepts	Key concept:	Context statement
	System	
	Related concept(s): Processes, Networks and Scale	Global Context: Orientation in time and space
Statement of Inquiry	Systems lend themselves to the practice of understanding the world through networks and processes at various scales	Students will explore peoples, boundaries change and interaction.

Statement of inquiry (Focus of the unit)

Systems lend themselves to the practice of understanding the world through networks and

Engaged Learning Project Idea

processes at various scales

How do you boldly go where no man has gone before...without a map?

Inquiry questions

Line of Inquiry (Factual): Students will be able to use maps as useful and diverse tools to tell us where we are in the world both on paper and digitally

Factual Question: How can you tell where you are using a map? (Grid references, ordinal points, contouring, symbols)
What's scale got to do with it?

How can I tell if I am going in the right direction using maps and technology?

Line of Inquiry (Conceptual): Students will be able to understand the importance of knowing where we are

Conceptual Question: How do we find where we are on the planet?

Line of Inquiry (Debatable): Students will be able to understand that all maps are not created equal – some are better than others

Debatable Question: Paper mapping is old school – it's much better to use satellite navigation - discuss

Subject objectives

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Type of summative assessment task(s)

A	B	C	D	Type of task
	X	X	X	Google Map of neighbourhood with guidebook in appropriate language area

Engaged Learning Project Idea

Assessment Rubric

Criterion B: Investigating

Maximum: 8

Students should be able to:

- choose questions to research
- follow a simple action plan to investigate a research question
- use methods accurately to collect and record information consistent with the research question
- answer the research question.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ul style="list-style-type: none">• chooses a question to research• makes a limited attempt to follow a simple plan to answer a research question• makes a limited attempt to collect and record information• makes a limited attempt to answer the research question.
3–4	The student: <ul style="list-style-type: none">• chooses a question to research• partially follows a simple plan to answer a research question• uses a method or methods to collect and record some information in line with the question• partially answers the question.
5–6	The student: <ul style="list-style-type: none">• chooses a question to research• satisfactorily follows a simple plan to answer a research question• uses methods to collect and record appropriate information in line with the research question• satisfactorily answers the question.
7–8	The student: <ul style="list-style-type: none">• chooses a question to research• follows a simple plan completely to answer a research question• uses methods accurately to collect and record appropriate information in line with the research question• completely answers the question.

Engaged Learning Project Idea

Criterion C: Thinking critically

Maximum: 8

Students should be able to:

- identify ideas, events, issues or arguments
- analyse a range of sources in terms of origin and purpose
- identify different views and their implications
- make connections between information to give an opinion.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ul style="list-style-type: none">• makes a limited attempt to identify the main points of ideas, events, issues or arguments• identifies the origin and purpose of some sources• identifies some different views• makes connections between information to give limited opinions.
3–4	The student: <ul style="list-style-type: none">• identifies some main points of ideas, events, issues or arguments• identifies the origin and purpose of sources• identifies some different views and suggests some implications of these• makes connections between information to give simple opinions.
5–6	The student: <ul style="list-style-type: none">• identifies the main points of ideas, events, issues or arguments• recognizes the origin and purpose of sources• identifies different views and their implications• makes connections between information to give opinions.
7–8	The student: <ul style="list-style-type: none">• identifies in detail the main points of ideas, events, issues or arguments• analyses a range of sources in terms of origin and purpose• clearly identifies different views and their implications• makes connections between information to give a relevant opinion.

Engaged Learning Project Idea

Criterion D: Communicating

Maximum: 8

Students should be able to:

- communicate information and ideas using an appropriate style for the audience and purpose
- organize information and ideas in a way that is appropriate to the specified format
- create a list of sources of information that follows the task instructions.

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student: <ul style="list-style-type: none">• tries in a limited way to communicate information in a way that is clear to others• tries in a limited way to organize information and ideas according to the task instructions• makes a limited attempt to list sources of information following the task instructions
3–4	The student: <ul style="list-style-type: none">• communicates information and ideas in a way that is sometimes clear to others• organizes information sometimes in the order needed for the task• includes a list of sources of information that sometimes follows the task instructions.
5–6	The student: <ul style="list-style-type: none">• communicates information and ideas in a way that is often clear to others• organizes information often in the order needed for the task• creates a list of the sources of information that often follows the task instructions.
7–8	The student: <ul style="list-style-type: none">• communicates information and ideas in a way that is clear to others• organizes information completely in the order needed for the task• creates a list of sources of information that follows the task instructions.

Year 1 MYP Geography – Where in the World are we?

How To: Create a Personalised Google Map Online

Introduction

Contour Education has also created a YouTube video on using Google Maps, which can be found here: http://www.youtube.com/watch?v=DF_yhDuoXQI

Step 1: Access google maps

Go to <http://www.google.com/maps>

Step 2: Register with Google **(YOU DO NOT NEED TO DO THIS IF YOU ALREADY HAVE A GMAIL ACCOUNT)**

You will need to be registered with Google to access the full range of features within Google Maps.

Engaged Learning Project Idea

This should take you no more than 2 minutes to complete but you will need to register with an email address. Incidentally, this registration will also provide you with a Gmail account and access to Google's many other online applications (such as Google Docs).

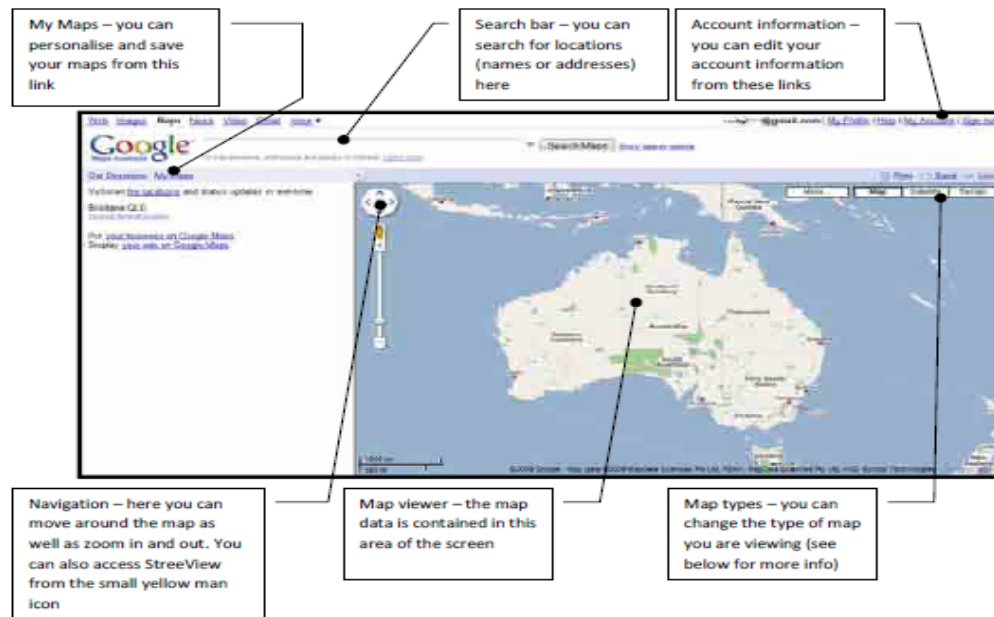
In the top right-hand corner of the Google Maps homepage you will see a 'Sign in' link. Click this.

Then look for the 'Create an account now' link to create your new Google account. You will need to enter your current email address and choose a password.

You will be sent an email to the address you nominated and you will need to click on a link within this email to activate your account. Once that is done you are registered and ready to sign in. Go back to the Google Maps homepage, click the 'Sign in' link and enter your account details to sign in to Google Maps.

Step 3: Google maps basics

If you have used Google Earth you will find Google Maps much more basic. You cannot, for instance, create a tour in Google Maps in the same way you can in Google Earth. However, you can place **Placemarks**, with embedded information and link them with a line file to show your reader where they should be moving if you would like them to visit points in a certain order. Being creative and flexible can often solve problems! The basic features of Google Maps can be found in the image below. Search for your location and play with the basic features to get an idea of how the application works.



Map Types

- A plain vector map showing main features
- A satellite image (not real time)
- A satellite image with some features (such as roads) identified
- A 3D terrain view showing the lay of the land (similar to Google Earth)

Step 4: Creating your own map

To create your own map in Google Maps, you will need to be signed in to Google Maps. Click on the 'My Maps' link to access this section of the site – here you can create your own maps, view and save other people's maps and more of the advanced features of the site.

Look at the My Maps section of my Google account as seen in image to the right. You can see some of the maps that have been created. The 'Featured content' heading refers to content



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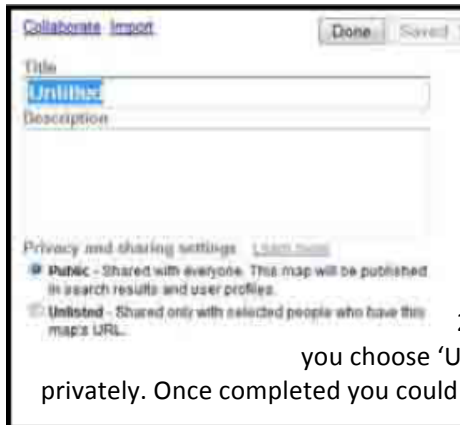
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Engaged Learning Project Idea

created by Google that you can also add – there is a distance measurement tool, Youtube videos, weather, hotels and many many more features here.

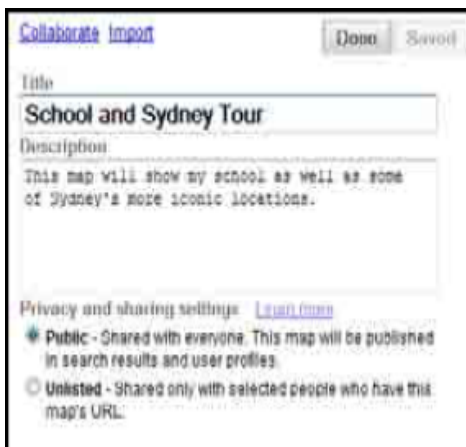
To get started creating your own map do the following:

1. Hit the 'Create new map' button. See the image below. You will need to select a name for your map and you should also enter a brief description in case other users find your map useful.



2. Choose whether or not you want your map listed for the general public. If you choose 'Unlisted' you can select and invite other users to collaborate on the map privately. Once completed you could then list the map publically if you wish.

In this example a map is created showing a school in Sydney as well as some of Sydney's more famous landmarks (like a virtual field trip).

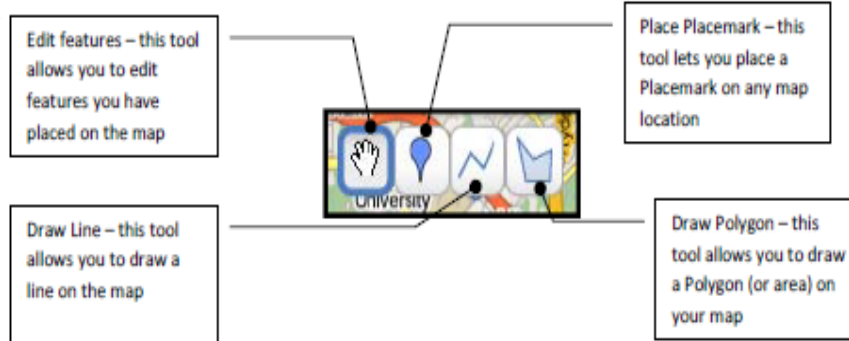


3. When you have entered your details, hit 'Done'.

You have now created an empty map.

Find and click on your map in your My Maps section, then hit Edit to begin editing the map.

To place features on your map, look for the toolbar that is now visible in the upper-left corner of the map screen (see on the next page)

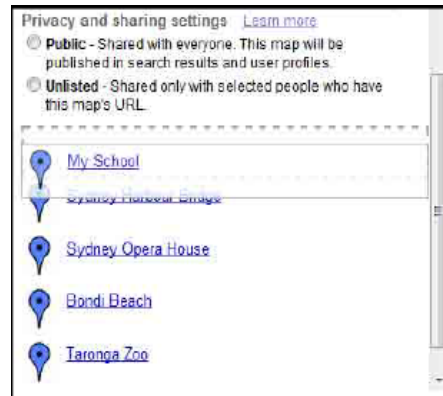


When you to get a place of interest you will place a Placemark and enter a name for the location, see below. If you wanted to create a map showing rivers in my area you might use the Line tool while if you wanted to display parks in my suburb, you might use the Polygon tool. Think carefully about the features you are mapping so that you select the appropriate tool to use.

Engaged Learning Project Idea

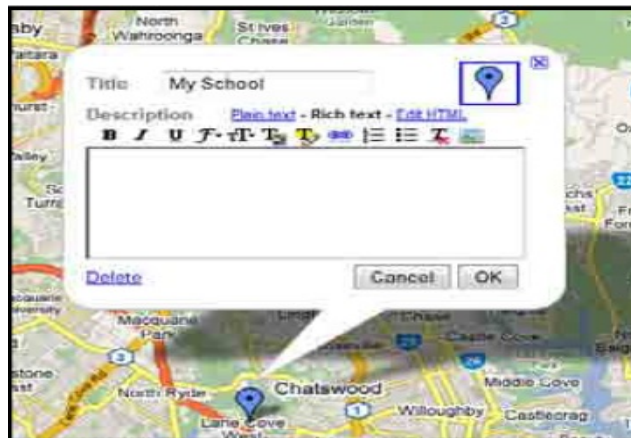


Create your map and place Placemarks, Lines or Polygons (or a combination) and a name for each site on your map now. As well as using the search bar, you should also use the different map types to help you accurately locate your Placemarks, Lines or Polygons. When you have finished placing all of your map features on the map, check that they are listed in the correct order. You can change the order by clicking on a Placemark in the menu to the left of your screen and dragging it to its correct location, see below.



Step 5: Adding Content to Locations

To add content to a Placemark, Line or Polygon you have created, you will need to find the Placemark, Line or Polygon in the menu to the left of screen and click it. This will open the feature in the map, allowing you to edit its contents. See below:



As you can see in the image above, you can use 'Plain text', 'Rich text' or 'Edit HTML' to add information to your Placemark. Plain text is, astonishingly, plain text. You will most certainly want to add some colour to your feature so Rich text, as can be seen in the above image, will give you many more options to achieve this. HTML is not going to be used for this activity. For this example we will use the Rich text option to add information to our features.

Images

Inserting images into Google Maps is easy. You can, however, only insert images from the internet. The key thing to remember is that you need the URL (website) for the image that you want to insert, not the page that the image is sitting on.

To insert an image into your feature (Placemark, Line or Polygon) place your cursor where you would like the image to go and hit the Image button, right. You will be asked to enter the URL of the image.

To get the URL from an image on the internet, right-click on the image and select 'Copy Image

Engaged Learning Project Idea

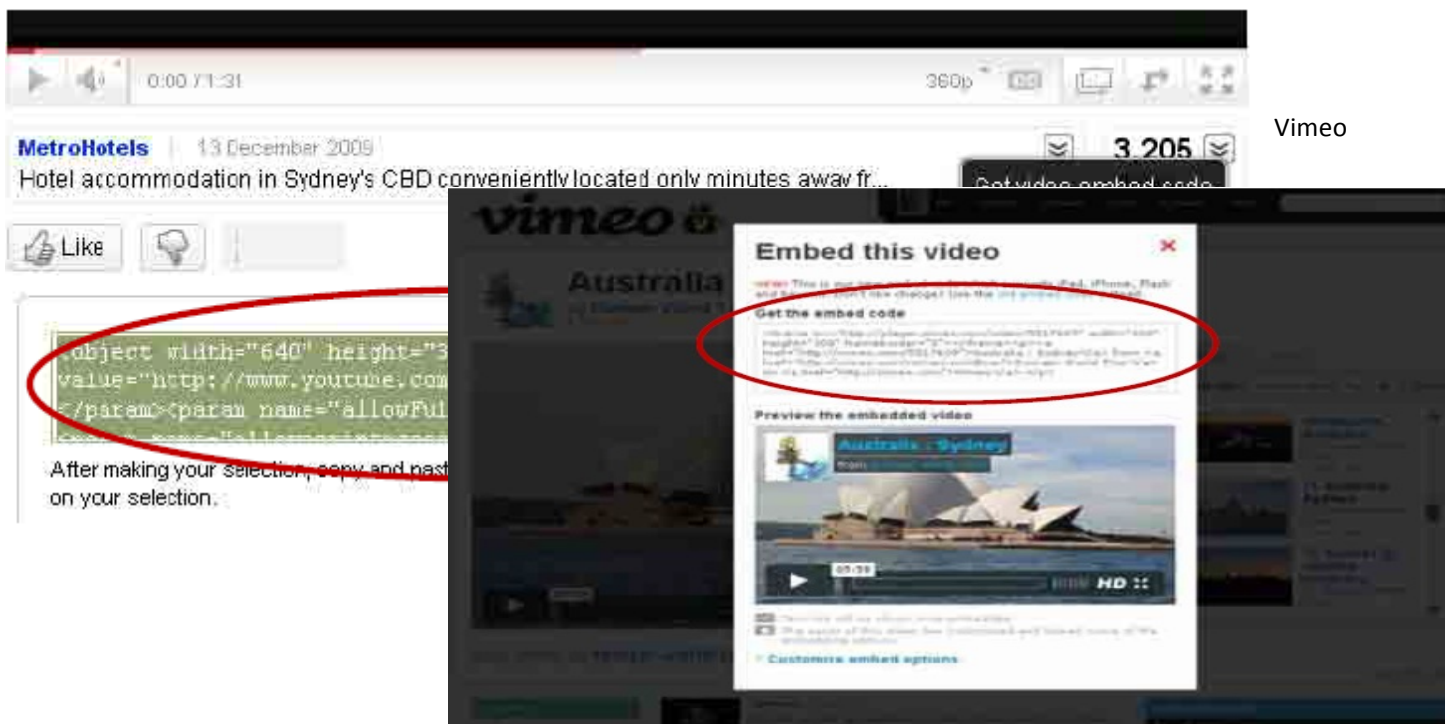
Location' or if you are using Internet Explorer, right-click and hit Properties. From here you can copy the URL and then close the Properties box. Paste the URL into the field in Google Maps. Hit OK and your image should be displayed in your Placemark (or Line or Polygon) as in the image below.

Note: If you are selecting images from flickr look for an 'All Sizes' link and then right-click on the image. Select 'View page source' and you will view a screen similar to the screenshot below. You then need to find the link to the image on this page – it usually ends in .jpg. This gives you the link directly to the image, not to the page that the image is on.

Videos

You can insert videos from any website that allows you to embed video. Go to the site you wish to use your video from and find the embed code. See a few examples below to give you an idea of what you are looking for.

YouTube



The image shows a video player interface for a video titled "Australia" by MetroHotels, dated 13 December 2009. The video has 3,205 views. A red oval highlights the embed code in the source code of the video player. The embed code is:

```
object width="640" height="360" data-bbox="115 495 360 555">

value="http://www.youtube.com/v/..." data-bbox="115 515 360 535"/>

/param<param name="allowFull" data-bbox="115 535 360 555"/>


```

After making your selection, copy and paste the code on your selection.

The video player also shows a "Vimeo" logo and a "Get video embed code" button. A red oval highlights the "Embed this video" dialog box, which contains the embed code and a preview of the video.

Copy the embed code and go back to your Google Map.

First you need to make sure you are Editing the placemark/line or shape but instead of clicking on the 'Rich Text' link, click on the 'Edit HTML' link.

Engaged Learning Project Idea



Now simply paste the embed code that you copied from your video earlier. Usually you would place the video at the very end of the post. When you hit 'Done', your video will be embedded into your placemark/line/shape and anyone who views this map will be able to play and view the video as well.

Step 6: Saving your work

Once you are done, find the 'Save' button and click it. This will save your map, with all Placemarks, lines and other features that you have created, to your My Maps page and allow you to keep working.

When you are done simply hit the 'Done' button to save everything and close your map editing session down. It is as simple as that. You can now move on to another map, view maps created by other users or simply navigate around Google Maps.



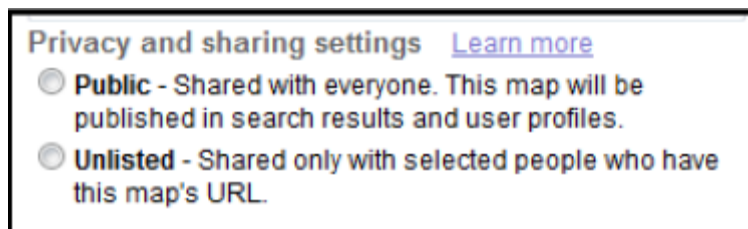
on to

click on the

To get back to your map in future, click on My Maps and name of the map in the menu to the left of screen. You can begin editing again by pressing the Edit button.

Step 7: Sharing your work

Finally, you will want to share your map with the world, or with your students or colleagues. The easiest way to do this is to make your map available to the public when you are editing.



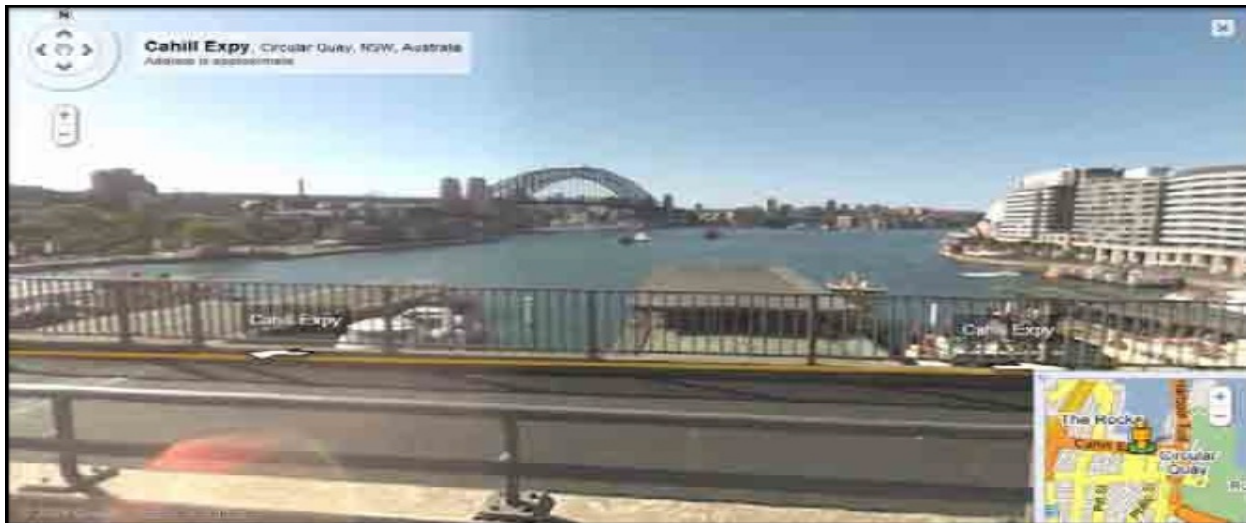
Step 8: StreetView

Note that not all areas within Australia or the world have StreetView at this stage, many areas are yet to be covered by Google so this application should be trialled carefully before being used in class. This additional step is really designed to introduce you to the StreetView application that is part of

Engaged Learning Project Idea

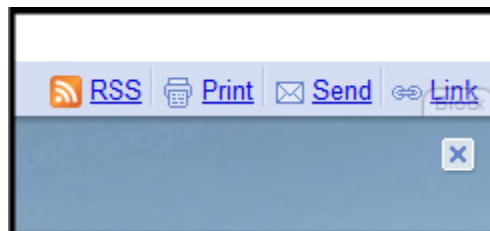
Google Maps. If you look carefully at the navigation area you will see a small, yellow man icon. This is the StreetView icon and by dragging this little man somewhere on your map, you will be able to view a street level image of that street.

By

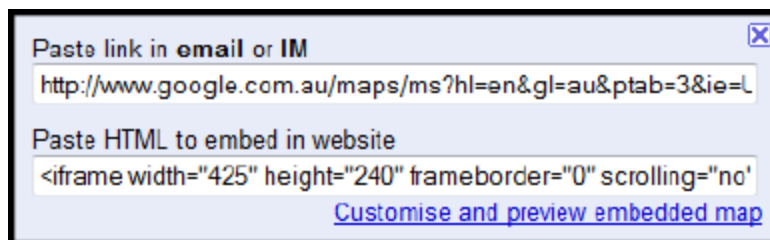


clicking and dragging your mouse, you can change the view. You can also click on the white arrows to move the view up or down the street, although dragging the small yellow man icon does this a lot easier.

You will also notice in the top-right corner of the screen here that there is a 'Link' button.



By clicking on this button you can get some code that you can paste into your Placemark, Line or Polygon (Paste HTML to embed in website). This will create a link to the StreetView image if you paste this code into your feature. If you have a separate website, it will place a small map in the website for your users to navigate.



Experiment with the features of StreetView as the application is constantly undergoing changes and updates (since it is relatively new to the Google family). You may find some exciting uses for this tool as a way of showing your students where they are going for a field trip or how a particular environment looks, or showing your teaching colleagues a more detailed view of where you live and work.

Bibliography

Ross, Simon. (2003) Basic Mapwork Skills