



## Spatial Association

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*Visual literacy is increasingly diversified in recent years. It has been amplified by critical thinking – flowcharts can be used in a variety of ways and are now one in a number of graphic devices (amongst radial charts, mind maps, timelines, diagrams etc.). The process of mapping and diagrammatic annotation (a geographic staple) has never been simpler as programs of CAD, GIS and web page design merge into a common thread. Whilst the terminology may be different, a large number of skills are transferable between these programs.*

*Geography is in the box seat to take advantage of these changes in technology. Our high flying students assess issues from location-based and thematic angles. They utilise problem solving skills and “transform abstract thought efficiently into graphic, tangible forms” (<http://www.visual-literacy.org>, 2007). Not only are we using this technology, but we are also (hopefully!) getting into the field to do fieldwork (or setting it as a homework task at the very least).*

*Are we underselling ourselves? Certainly! With the New SACE on our doorstep, we should be campaigning vigorously to see our subject ranked (in an R-12 forum) amongst the pure sciences, mathematics and English as a critical subject to understand our world and the connections within it. As western culture becomes increasingly urbanized, we must see the connections between people and the environment.*

### Shift Happens

<http://shifthappens.wikispaces.com/>

This information within this presentation will change your life. The data was originally presented within a school environment in the USA to think about what our students will need as citizens of the Twenty-First Century. Two years later and around 20 versions of the presentation, this statistical comparison has merged into many forms.

Whilst the original PowerPoint is compelling enough, the links that shoot off from this site also provide plenty to think about, especially Global Mind Shift (<http://global-mindshift.org/>). Whilst the ecological and spiritual values are fairly high, this site is a very sound starting point for looking at the Resources section of the Year 12 curriculum, sustainability and the futures area of the SACSA Framework.

### Zoomify

<http://www.zoomify.com/>

Zoomify is an industry application, freeware tool and software component which makes high-quality images that can be zoomed and panned. This interactive view can be used on the Internet or as a standalone product. It suits jpeg images, html files and Flash applications. The EZ or express version is a free download which could be used to manipulate high quality image files (such as raster images or the NASA satellite imagery).

The product can also be purchased or in the case of Adobe CS3 users (the new Macromedia design suite equivalent) have this as an inbuilt tool for the Fireworks component of their software. For the IT savvy student, this could be the start of an interactive geographical enquiry.

Additionally, the website's main page also features a close-up of the Isle de Cité and there is an image of the New York “ground zero” site for closer inspection. This is a nifty program for a sideline activity for aerial photographs or investigating aspects of change over time in comparing images.

### Google For Educators – Google Earth

[http://www.google.com/educators/p\\_earth.html](http://www.google.com/educators/p_earth.html)

The wide reach and adaptability of Google Earth with the program itself and add-ins/plugin-ins is expansive, yet possibly just the start of a new range of data manipulation tools for satellite imagery. There are graphing, population and biodiversity examples just on this page.

The menu bar to the left of screen gives to resource rich links: the tools for your classroom (giving search engine tips, alternative humanities related software [Sketchup and Picasa] and other advice and information) as well as the classroom activities link. Whilst the selection is a little small at the moment, the offerings are likely to, as Google has, grow like topsy.

### Flash Earth

<http://www.flashearth.com>

Don't have a broadband internet connection? Like to access more than a small window for satellite imagery. Paul Neave, Flash Earth's creator thinks he may have the answer. The website works as an interactive satellite photography medium with a rectangular projection instead of a globe for Google Earth.

It is certainly faster on a broadband connection, but if you have dialup or are working at slower speeds, then this site may be an option. Note, however, you will need an up-to date version of the Flash Player

software. The site feeds from different source data and this can be used to compare the differences of satellite imagery taken at slightly different times. Flash Earth uses Microsoft's Virtual Earth, Google Earth and Yahoo Maps at smaller scales NASA's Terra server, Open Layers (<http://www.openlayers.org> – also worth viewing) and Ask.com are available. The data sources are also linked at the base of the page for ready reference. This is one handy product!

## Geospatial21

<http://www.geospatial21.org/>

The ability to use online training materials for GIS in previous years has been reasonably limited. This site, organised by the Kidsonline Company (a USA based educational firm) has streamable video downloads for satellite technology and its use in GPS and satellite imagery. Whilst it looks as though the site has 'stalled' in some respects, the last updates being in 2006, it may be worth viewing some of the information to integrate into some remote sensing lessons or a unit on the topic. Hopefully the site will be extended – perhaps a friendly email to them will coax more development to the site!

## Digital Geography

<http://www.digitalgeography.co.uk/>

This site by Noel Jenkins is an up-to-date UK effort. The blog allows for updated teacher resource links, how-to posts and other nifty embedded material. (One of these is the use of Slideshare (<http://slideshare.net>). There are menu sections for general topics, tag links to relevant subjects and the information can be taken on Really Simple Syndication (RSS feed) to your own school site or private web page.

This is one site to check regularly, even though the archives have been thoughtfully provided by Noel! (Malcolm McInerney has also visited Noel during a recent trip overseas. Many more of Noel's sites are featured on Malcolm's blog: <http://spatialworlds.blogspot.com/>.)

## uDIG GIS

<http://udig.refractions.net/>

The User-friendly Desktop Internet GIS (uDig) is a universal platform (Apple and PC) GIS program and an open source (freeware) option that is relatively new. The program, however, is more than spectacular. The fact that both platforms are serviced is a bold move and the application is worth taking the time to explore.

I have only utilised the program to display data layers rather than complete analytical tasks but more complex processes are available to use. It is a geospatial application and also a device through which software developers can create new, derived applications. Students with software code experience may find this program interesting. It is certainly an option to keep in mind when considering or reconsidering GIS applications in your school.

## Waterproofing Adelaide

<http://www.waterproofingadelaide.sa.gov.au/>

The South Australian state government is working with the people to secure our future water supply. The site documents changes the state government is making to ensure Adelaide's water supply is sustainable. This plan aims to create a blueprint for the management, conservation and development of water resources in Adelaide and semi-rural areas to 2025.

The site is appropriate for the new Stage 2 Course for obvious reasons and whilst most sections have not been updated since 2005, it is perhaps timely to revisit it after the winter we never really had in 2007. The site is also perhaps relevant for a water, rivers or sustainability unit of evaluating the effectiveness of sections of the plan or comparing a school or student's local environment to the plan.

## Community Websites

<http://www.communitywebs.org/>

This site is a compilation of pages that have been built by tertiary students in Adelaide. The information gives much about the local water catchment groups such as the Bremer and Angas River Catchments as well as the various friends of the National Parks sites. Whilst some sites do look as though they have been a university assessment piece, there is plenty of south Australian information relevant for different localised topics for primary and lower secondary students.

## Mountain Hazards - Sharing Knowledge on Disaster Preparedness in the Himalayan Region'

<http://disasterpreparedness.icimod.org/>

The international community is concerned with improving disaster management and preparedness, especially with the recent spate of bushfires, earthquakes and floods around the world. ICIMOD (The International Centre for Integrated Mountain Development) has initiated work on disaster preparedness in the Himalayan Region.

The site give information about field of disaster preparedness; mainly; floods, landslides and earthquakes; and build capacity in multi hazard risk assessment, as well as providing a platform for interaction and exchange of experiences. The prime target countries for the project are Bangladesh, India, Nepal and Pakistan.

The site values local and traditional knowledge for mitigation and would be an interesting case study for water issues in LEDC's for India and Bangladesh, as well as for option topic (geographical enquiry) information for the Stage 2 course.

Alternatively, it gives up to date information for middle school teachers on how hazards are being addressed as information for a regional case study.