Creating digital maps

Choosing the right software for you and your pupils

What software might pupils use to draw their digital maps?

A key way of engaging pupils with place and space is for them to draw their own map. This activity asks you to choose the software that you will use with pupils to enable them to create their own digital maps.

The notes begin by providing a brief overview of some of the strengths and limitations of the Soft Teach programme Local Studies and then provide additional suggestions for alternative software that could be used by pupils. These are by no means the only programmes that could be used and you are invited to submit alternative suggestions.

READ through the notes – you might want to keep the following prompts in mind as you do this.

- I have suggested some key features of the software that facilitate children’s map making. Use your notebook (notepad) to clarify your thoughts about why these features would help children create effective interactive digital maps.
- Research the software that you have available in your school
- Talk with your ICT coordinator and staff colleagues to find out their views on useful software for creating maps.
- Check with your ICT coordinator to see if there is any money available for new software.
- Choose the software that you will use to provide a hands-on map-making experience for pupils. Try it out and think about what worked well and what created difficulties. Were the pupils pleased with their maps?

One important element of our project was that all pupils had hands-on access to ICT. These notes provide further information about software packages that children might use to create their own digital maps.

ICT Software: Local Studies from Soft Teach

The programme that we chose to use during the project was `Local Studies` a software package from Soft Teach.
We felt the strengths of the programme to be:

- sets of keys which provide both pictogram and OS map symbols
- a drag & drop facility - this provides pupils with an easy way to build up a map;
- simple drawing tools that enable additional features to be added to the map;
- the capacity to build a map up in layers which enables pre-prepared map backgrounds to be imported into the background;
- the interactive hot-spots which can be linked to a particular location on the map. These open up to provide an additional text-box into which pupils can add text and images.

However, the programme has some limitations:

- It’s now feeling rather dated and a number of the features have not kept pace with more recent developments in ICT software generally. These mainly concern the running of the software on modern school networks, the limitations of the paint/draw package and the problems around creating and importing background maps to the correct size for the screen.
- As with all software packages you would need to use this one frequently to learn the idiosyncrasies of the programme and to get the most from the package.

If you have already purchased ‘Local Studies’ and have the software installed on your computers, you might be interested in the additional guidance notes that were originally produced to support the 2007-8 Primary Geography & ICT Curriculum Making Courses. [www.geographyteachingtoday.org.uk/images/text/GA_TDNorthGettingStartedLocalStudies.pdf](http://www.geographyteachingtoday.org.uk/images/text/GA_TDNorthGettingStartedLocalStudies.pdf)

If you have not already purchased Local Studies you may want to consider some alternatives which are set out below.
Creating Digital maps with generic software

What features should you look for in software that children will be used to create digital maps?

Ideally such software should have:

- the capacity to drag & drop symbols onto the map
- paint/drawing tools
- the ability to lock an outline map to the background and then build up the map image in layers
- hyperlinking from the map to another page, file or text-box

A number of software programmes that are in daily use in the classroom offer these features and could be used to create digital maps. The ones suggested here are software programmes that I am familiar with, though these are not the only ones. We will add recommendations to this list of generic software if you can create a similar short description and screen shot of the software.

Textease

Textease is a very versatile software package in use in many primary schools. The resource gallery contains a selection of useful map symbols which can be supplemented by your own resources.

A valuable feature of this software is the WORD Bank. Create your own word bank or word and symbol bank (you can add images too). Children can then simply drag and drop these onto their map.

Hyperlink the map to a separate Textease file which contains text, images, video, sound files or data. Using this technique you can create a personalised interactive map with added sound files and video as well as images and text.
Interactive Whiteboard Software (IWB)

This is now used in many classrooms in the UK. I would install the IWB software in the ICT suite on the children’s laptops and encourage them to create their personal maps using the IWB software. The completed maps can then be shown on the class whiteboard and adapted and worked on during a whole class discussion.

The lack of appropriate symbols in the SMART resource gallery was the main impediment to using this software to create digital maps. If you have an alternative software gallery of images and symbols available this will not prove an insurmountable problem. Promethean supply a set of OS symbols with their Active Studio software.

PowerPoint

It is possible to create digital maps in PowerPoint. The draw tools are good and Microsoft clip-art is a useful source of map symbols, though these need selecting with care.

Create hyperlinks to new pages within your PowerPoint to add images and text linked to a specific place on the map to create an interactive presentation.
GIS Software

There are a number of alternative mapping programmes (sometimes referred to as GIS (Geographical Information Systems) that you may already be using in school. Each of these works in a slightly different way and if you are considering purchasing one of these programmes it would be well worth talking to the software provider to find out what each of the programmes can and cannot do and also to a school where the software is in use. (Ask for recommendations.)

Your Regional Broadband Consortia might be recommending one of these packages which will mean the school can purchase at a discounted rate. See http://www.nen.gov.uk/ for a link to your local regional broadband provider.

Full details of these software packages are printed in the Ordnance Survey Magazine ‘Mapping News’ which is sent to every school in the UK and is also available online: http://www.ordnancesurvey.co.uk/oswebsite/education/mappingnews/

The Ordnance Survey, Geographical Association (GA) and the Royal Geographical Society (RGS-IGB) have reported on projects and produced additional guidance on using GIS. Most were written from a secondary perspective, though they would be worth reading if you want to extend pupils at the top of KS2 and/ or gifted and talented pupils.

Ordnance Survey: GIS for Schools
http://www.ordnancesurvey.co.uk/oswebsite/education/gisforschools/index.html

RGS-IGB: Getting Started with GIS
http://www.rgs.org/OurWork/Schools/Resources/GIS/Getting+started+with+GIS.htm

GA: What is GIS?
http://www.geography.org.uk/projects/gtip/thinkpieces/gis/

GA: Spatially Speaking Project
http://www.geography.org.uk/projects/spatiallyspeaking/furthermaterials/