

Case study

Title:	Digimap for Schools - http://digimapforschools.edina.ac.uk
Developed for:	Joint venture between Ordnance Survey and EDINA
Sector:	Education
Date Completed:	September 2010

Maps in Schools

Digimap for Schools¹ is an online mapping service for teachers and pupils in schools. Established in 2010 and building on the EDINA Digimap service for higher and further education, Digimap for Schools is a collaborative venture between EDINA, Ordnance Survey and JISC Collections. Digimap for Schools replaces the free paper maps previously offered by the OS to all 11 year olds. The service was awarded the GOLD Certificate for the best overall resource in the Geographical Association's 2011 Publishers' Awards. The GA Publishers' Awards aim to recognise material which is likely to make a significant contribution to geography in primary schools, secondary schools or colleges, and to

encourage the creative development of new materials.

Digimap for Schools provides easy access to a range of current Ordnance Survey maps from mini-scale, giving a great overview of countries, to OS MasterMap, the most detailed mapping offered by OS. Between these extremes are a range of mapping products including digital versions of Ordnance Survey's famous paper maps, the Landranger and Explorer series, which means there is a map suitable for just about everything. In addition, users can annotate the map with text and a range of standard and free-form shapes and then print out their customised map.

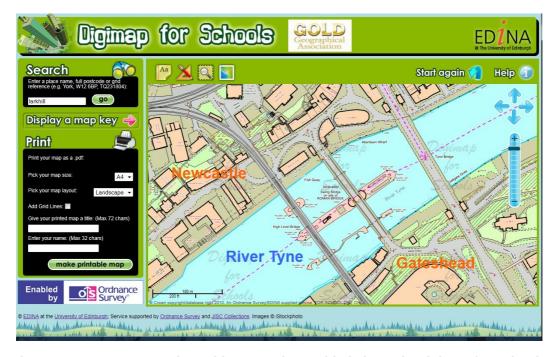


Figure 1 - OS MasterMap data with annotations added shown in Digimap for Schools

OSGeo Stack

Digimap for Schools is built using a range of OSGeo approved open-source software products. All screen maps are stored as flat files which are served by MapServer² to populate TileCache³. Small scale map tiles down to 1:25 000 were pre-cached to improve speed and larger scale maps are cached the first time they are requested. Prints of MasterMap data use a vector version of the data which is stored in PostGIS⁴. The mapping control on the user interface is handled by OpenLayers⁵ which is flexible, easy to customise and results in an intuitive interface for users.





At present, the print files are handled by Cadcorp's Geognosis®⁶, a proprietary package which creates excellent cartographic output. All the software described here comply with Open Geospatial Consortium⁷ standards which allows developers to plug different packages into the software stack. This interoperability has been the key to delivering a fast and reliable service which is flexible and adaptable.

- 1 http://digimapforschools.edina.ac.uk
- 2 http://www.mapserver.org/
- 3 http://tilecache.org/
- 4 http://www.postgis.org/
- 5 http://openlayers.org/
- 6 http://www.cadcorp.com/
- 7 http://www.opengeospatial.org





Developed by:	EDINA at the University of Edinburgh
Contact:	Addy Pope (addy.pope@ed.ac.uk) or Carol Blackwood (carol.blackwood@ed.ac.uk)