

Mapping out a whole new world for students

LEEDS Grammar School is working with other Leeds schools to pioneer new teaching methods designed to put the "wow" back into geography teaching, with Spatially Speaking, a new initiative funded by the Geographical Association.

Mapping leaps off the page and on to the computer screen, allowing information or data contained in the map to be viewed and analysed in an infinite number of ways.

Geography comes alive in a new way, as whole districts, regions and continents can be flown over by the student as they analyse spatial data.

This work is being shared by Leeds Grammar School with other local schools.

Work with Geographical Information Systems (GIS) began at Leeds Grammar School two years ago when ESRI (UK) funded development of the use of their software across the curriculum.

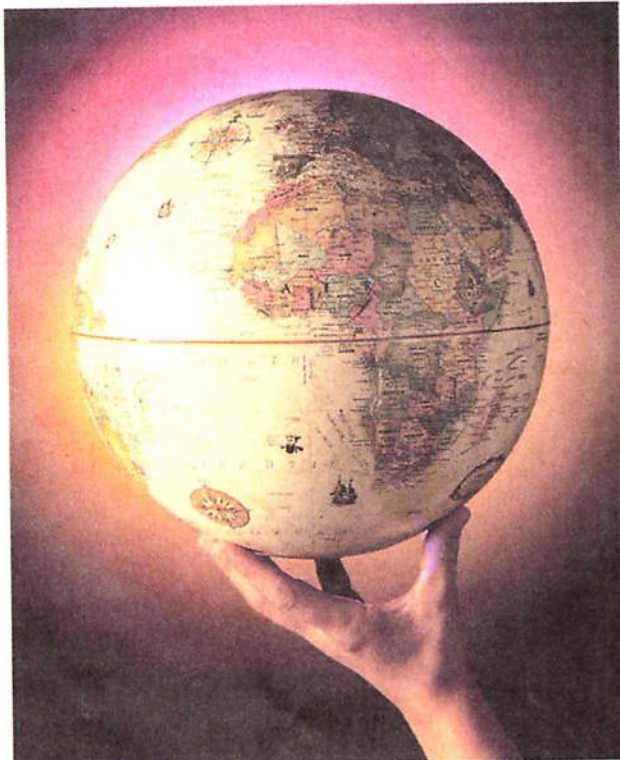
Mark Smith, head of biology at LGS, explained: "We have been looking at ways in which GIS can be applied to different subjects.

"In biology, for example, students can see on screen how a disease spreads, whether it is a modern epidemic or a historical one like the Black Death.

"In maths, they can call up a sewage system and calculate how many houses would be affected in a district if a pump breaks.

"Using computers in this way, to enhance a subject and give it immediacy, has an obvious impact on young people's enthusiasm for learning.

"Our work has been funded by ESRI (UK). Further support from the Geographical Association now means that



Global view: Geography comes alive in a new way, as whole districts, regions and continents can be flown over.

we can share this knowledge with other schools in teaching geography."

Steve Dunn, geography teacher at Leeds Grammar, was also keen to say how well co-operation with schools in the area was progressing.

"When students can use live raw data and demonstrate spatial relationships through their own use of GIS, their geographical understanding is taken to a much higher level."

Steve Kitson, who teaches geography at Wortley High School, said: "I was invited to Leeds Grammar in Febru-

ary and my immediate reaction was, 'Wow, this is amazing'.

"This is a great way to inspire kids - you can literally fly over an area and see what is happening. It helps pupils see at once that what they are learning is exciting, relevant, up to date.

"Lots of pupils really enjoy IT, and linking it to geography in this way helps them understand what we are doing as we move from map books to computer screens. Our first worry is to make sure that computers are up and running, but we will get there."

Rob Ghosal, head of geography at Crawshaw School, said: "Teachers Mark Smith and Steve Dunn have done some amazing work with GIS.

"They have helped us use the software and been very generous in giving us support over installing it and they are there when we need them.

"I was stunned by what they have achieved. We are finding our feet using Google Earth initially, but we are going on to emulate some of their work. Using basic data you can encourage pupils to research in a new way and solve problems it would otherwise have been very difficult to set out."

Work on GIS at Leeds Grammar School received a boost two years ago when funding for teacher time by ESRI (UK). In return for this, the school was asked to develop 12 lessons using ArcView. Work continues this year in fieldwork, looking at how hand-held PDAs can be used to record field results.

"These are very exciting times for us," said Mr Smith. "We are delighted that schools in Leeds are able to work together in this way to benefit all our students."

David Mitchell, Geographical Association GA (ICT projects co-ordinator) added: "Using digital geographic information is really energising the geography of pupils getting involved with this exciting technology.

"GIS is essential to industry and services and so important for young people to understand."