IDEERS Newsletter

An *EPSRC funded project by the University of Bristol's Earthquake Engineering Research Centre for Introducing and Demonstrating Earthquake Engineering Research in Schools

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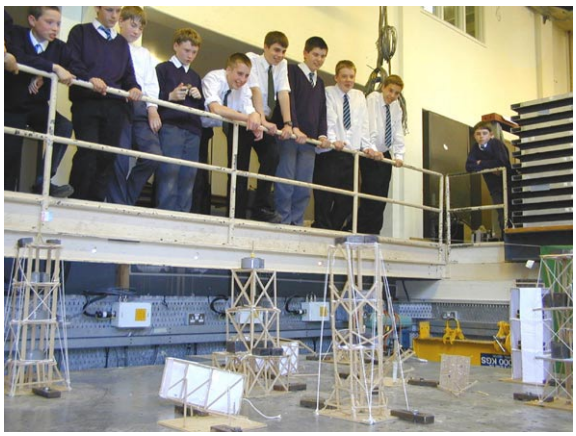
Testing models for IDEERS

Rednock School students with their models

In May, this year, students from Rednock School, Gloucestershire, brought model buildings made from MDF, paper and string to the Earthquake Engineering Research Centre (EERC) to be tested on the EPSRC earthquake simulator. The school has been assisting with the development of the IDEERS project which will be launched in Summer 2001. IDEERS will be a web-based competition for secondary schools to design models of earthquake resistant buildings.

The Rednock students made a variety of structures based on a specification prepared for them by the EERC. They had been testing the clarity of the specification and had been encouraged to find any loop holes enabling all models to be made indestructible.



Models being tested on the earthquake simulator

The models were tested for artificial earthquakes of gradually increasing intensity. The winning one, the "most-efficient", was defined as the model with the highest value for the ratio of the maximum earthquake it resisted to its mass. Everyone enjoyed watching the tests and a competitive atmosphere developed with much cheering when somebody else's model failed.

*Engineering and Physical Sciences Research Council

Overall, the students had a good grasp of the idea of bracing their structures against horizontal load, using MDF and string cross bracing, paper walls and guy ropes. Some had based designs on triangular and honeycomb shapes and the Eiffel tower, because they believed all were strong structures. Students found the most enjoyable aspect of the project to be building their models and experimenting with different support systems.

IDEERS Website

The IDEERS website at **www.ideers.bris.ac.uk** is now hosted on a new Pentium III 800MHz computer devoted solely to the IDEERS project. This new PC has 15GB of high speed hard disk capable of serving many web visitors simultaneously, and software allowing high speed searches of the website. With so much space, the processing of digital pictures and video for the final website is now possible.

Although the preliminary website may appear to have changed little since its implementation, much behind-the-scenes work has been going on, preparing the computer and resource material for the full website. For example, software on the PC can track who visits the website and which pages are most popular. It is also possible to identify where visitors have problems navigating the site, so improvements can be made. Other software has been installed and tested allowing development and implementation of interactive pages that will make the IDEERS website a useful educational resource in earthquake engineering.

Bristol schools in pilot IDEERS project

Next year, six schools in and around Bristol will be piloting the IDEERS project, before it is launched nationally. All state schools, they include, from Gloucestershire, Katherine Lady Berkeley's, and from Bristol, St George Community College, Cotham Grammar, Broadlands, Speedwell and Brislington. The pilot project will be part-funded by the Bristol University's Widening Participation Strategy, encouraging local state schools' involvement.

The schools will be testing the complete project including the website and the competition. Engineers from WS Atkins' Bristol office will be judging the pilot competition in April 2001.

For further details on the IDEERS project visit the web-site at www.ideers.bris.ac.uk or contact:
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