## **IPEERS** Newsletter

An <sup>\*</sup>EPSRC funded project by the University of Bristol's Earthquake Engineering Research Centre for Introducing and Vemonstrating Farthquake Engineering Kesearch in Schools e 6 May 2002

## The First National **IDEERS** Final

The first national IDEERS final took place at the University on March  $20^{\text{th}}$ . Sixty-four 12-15 year old students from two independent schools and two state schools participated in the event. The schools included Broadlands, Bristol, who helped pilot the project last year and who now use IDEERS for teaching Design and Technology. The others were St Peter's, a boys' schools from Devon, Godolphin Girls' School from Salisbury and Bedminster Down, a comprehensive from Bristol. All the teachers said that they and their pupils had thoroughly enjoyed preparing for the



challenge and that they had found the web-site to be an excellent resource. They all plan to enter **IPEERS** again and to include it as part of their teaching. And this was said

A team from St Peter's School

before they had experienced the fun of the shaking-table tests.

This years judges included Colin Taylor, the Director of the Earthquake Engineering Research Centre, Anna White, a postgraduate student from the University's Earth Sciences and four engineers from the IDEERS sponsors. They were Chistophe Junillon and Sophie Edgar from WS Atkins, Mike Oldham from ARUP and Adrian Abell from EQE. At the beginning of the day, they talked to the teams and judged their displays on earthquakes and their effects

and how they had developed their models. Then during the shaking-table tests, they judged when models had failed. As usual everyone enjoyed the tests, and as the picture shows than the students!



the picture shows, the judges seemed more excited

## **IPEERS** at-Bristol

**IPEERS** was run with the at-Bristol Science Centre as a one-day event during National Science Week in March. Fifty-two Year 9 students from ten local schools were given  $4\frac{1}{2}$  hours to assemble their model buildings. Using the IDEERS web-site, teams had planned models and cut MDF in advance of the challenge, and they arrived with sketches of well

\*Engineering and Physical Sciences Research Council

thought out designs. Civil Engineering students and academics from the University were on hand to help

with the design and building of the models. At the end of the day, teams took their models from the science centre the to University to test them on the shaking-table.



The University's Widening Participation Scheme and BNFL Magnox Generation supported the event, funding materials and equipment, and prizes for the teams with the best models. The winning teams included an all girls team and two mixed teams.

Widening Participation aims to encourage students from a wide range of backgrounds to view the University as accessible to them. After the event, a teacher from a winning state school wrote saying that her pupils were now motivated and had gained confidence. Because of their school's reputation, they entered the challenge thinking everyone else would be cleverer and that they would fail. They thought the whole day was fantastic. Widening Participation certainly had an impact on those students.

## **IPEERS** Teachers' Workshop

March also included a day's workshop in Liverpool, organised by the Construction Industry Training Board, and run by Dr Wendy Daniell. 25 teachers from geography, maths, science and

technology attended it. were They introduced to the project and the resources on the IDEERS web-site, and they experienced



Experimenting with resonance

hands on activities to use in the classroom. Feedback was generally very good with geography teachers describing the web resource as excellent and technology teachers interested in modifying the building challenge to suit the abilities of their students.

For further details on the **IPEERS** project visit the web-site at <u>www.ideers.bris.ac.uk</u> or contact: Dr Adam Crewe, Department of Civil Engineering, University of Bristol, Queen's Building, University Walk, Bristol BS8 1TR. Tel: 0117 928 8880 E-mail: A.J.Crewe@bris.ac.uk