

## [P37] 'Kit in a Kase': versatile science activities for all

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The Centre for Effective Learning in Science (CELS) at Nottingham Trent University (NTU) is a HEFCE funded Centre for Excellence in Teaching Learning (CETL) aiming to create a new image for science as relevant, accessible and achievable. This will be achieved by improving science teaching and promoting science with young people through working with NTU academics and teams from the wider community, schools and colleges.

The Outreach strand of CELS, coordinated by Dr Georgina Westbrook, has run events and activities for over 6000 school children of all ages in the last 18 months. We have done this through a variety of events such as science festivals, lectures, workshops and demonstrations hosted in our new facility at our Clifton campus (**Figure 1**) as well as through our 'Kit in a Kase' activities in schools.



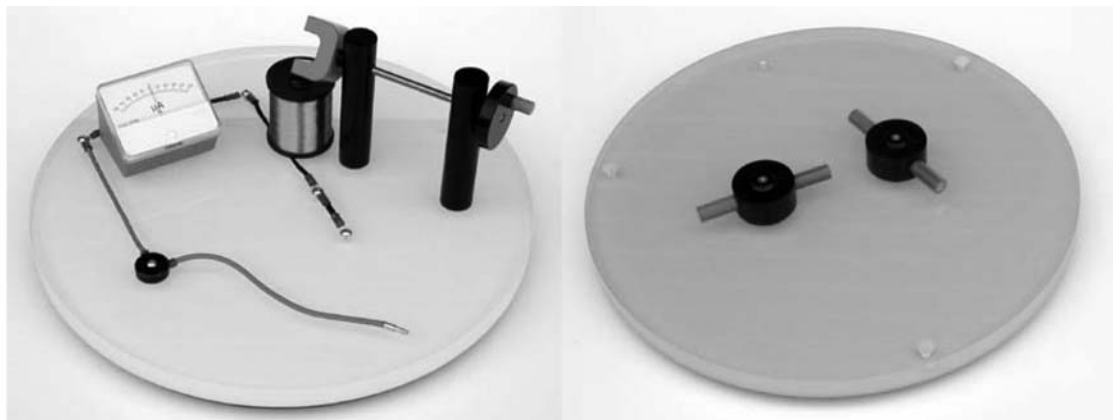
**Figure 1:** The new CELS building at the Clifton Campus of NTU showing our school laboratory, lecture theatre with demonstration bench and our IT suite

The 'Kit in a Kase' concept, originally developed in collaboration with The University of Nottingham's Public Awareness Scientist, Dr Sam Tang, allows scientific topics to be delivered in the classroom with the emphasis firmly on practical experimentation. The topics explored are based on the familiar and therefore make the science relevant to the students. 'Real' scientists deliver the activities not only giving the children an alternative learning experience but exposing them to science role models to help dispel the myths surrounding the subject.

The Kits themselves have developed in two stages. Initially designed with primary schools in mind, the Kits contain equipment that can be bought 'off the shelf' in high street stores and supermarkets therefore reducing the costs and the hazards involved. These activities have proved extremely popular with schools in the East Midlands region and have supported the pupils' studies by encouraging their interest in science, backing up the curriculum and extending their practical skills base (**Figure 2**). At present, the topics covered by these Kits include:



**Figure 2:** The 'Oil Spill Kit in a Kase' in action



**Figure 3:** Two examples of the exhibit style resources used in the new 'Magnetism Kit in a Kase'

- Colour Chemistry
- DNA
- Environmental effects of an Oil Spill
- Materials
- The Body

The second stage has seen the development of a set of resources designed for all age ranges with changeable supporting materials. New hands on experiment Kits are used in schools and can be fixed for use in an exhibit style format so allowing the science topics exposure to the general public (**Figure 3**). The topics covered by these new Kits will include:

- Magnetism
- Drugs
- Materials
- Sports Performance

Through the 'Kit in a Kase programme, CELS is promoting science and inspiring people of all ages into thinking about what goes on around them. These 'Kits have been used in schools already as well as more public events such as the Newark and Nottinghamshire County Show and the Nottingham Science City celebrations and East Midlands 'i-Festival'.