

SUSTAINABILITY MATTERS IN GCSE COURSES

How can you get students to think about sustainability in their GCSE work?

The new D&T syllabuses that you will start teaching in September place much greater emphasis on sustainability than before. This update, and the links to six downloadable pdfs on our Practical Action website, suggest ways in which you can introduce sustainability to your students. It will help them to understand social, economic and cultural factors, give insight into life cycle analysis, and suggest how they can use the six Rs to inform their own designing and making.

Visit http://practicalaction.org/?id=gcse_resources



Get started by inspiring your students with the work of some sustainable designers.

Message in a bottle

Ashley Phillips believes in sustainable design. He designed and made a geodesic dome, similar to those at the Eden Project. His dome reflects at least two of the six Rs. REUSE 4,000 of the plastic water bottles thrown away at the London



Marathon to create a new product – an 8 feet tall, self supporting geodesic dome shelter. RETHINK how to bind them together – use 40,000 elastic bands!

<http://www.ashleyphillips.f2s.com/sustainability2.html>



Technology Teaching Ideas Summer Term 2009



For more information about Practical Action's resources and training packages, call us on 01926 634519, email education@practicalaction.org.uk or visit www.practicalaction.org.uk/education

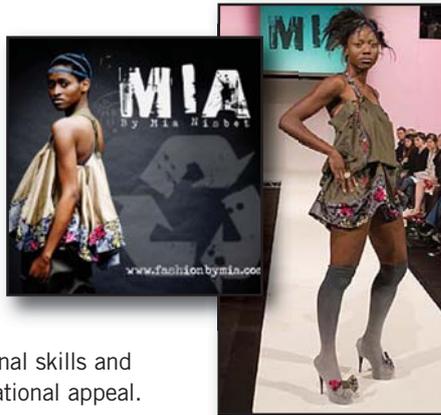
Practical Action, Schumacher Centre for Technology and Development, Bourton on Dunsmore, Rugby, Warwickshire CV23 9QZ www.practicalaction.org





Junky Styling

Mia Nisbet believes in ethical fashion design that is sustainable, wearable and durable. Her work exemplifies several of the six Rs. By combining western styles with traditional Malawian textiles she illustrates the way we can RETHINK as designers. She believes that we should REFUSE to saturate the market with new collections every few months but should design clothes that will last. She is training women in Malawi to REUSE traditional skills and materials to produce clothing with an international appeal.
<http://www.fashionbymia.com/>



Activity 1: Inspire your students!

Go to our website to find examples of inspirational, sustainable designers and products in your focus area.

http://practicalaction.org/?id=gcse_resources

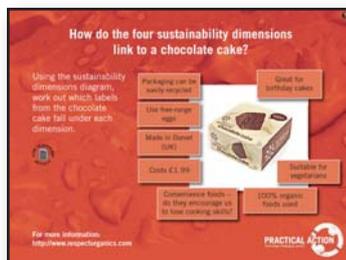
- Ask students to look at a designer or product that interests them
- Get them to note down anything that surprises or interests them
- Share ideas with the rest of the class
- Mind map as many words as they can think of that might have something to do with sustainable design

Activity 2: Sustainability dimensions

Students find it easier to identify environmental issues than economic, social and cultural issues. They are all included in the new specifications.

Help students understand the terms by getting them to look at some of the questions they might ask about each dimension.

- **Social.** Does the product make life better for people who use it in any way? If it doesn't, should we make it at all?
- **Cultural.** Does the product encourage the maintenance of traditional cultural values or traditions, e.g. festivals, dress?
- **Economic.** Could the cost of production be cut down by reducing the amount of material or energy used?



Now get them to look at a product to think about which of the dimensions some features of the product might come under – are they environmental, social, economic or cultural? You'll find products and labels for each focus area on the powerpoints.

