

A whirlwind tour of issues relating to textile waste

The figures

- The UK generates between 550,000 and 900,000 tonnes of textile waste every year. Most of this waste comes from household sources, with textiles making up about 3% by weight of a household bin.
- Waste textiles also arise during yarn and fabric manufacture, garment-making processes and from the retail industry.
- It is estimated that 400,000 to 700,000 tonnes of textiles are landfilled every year, a waste of valuable resources worth an estimated £400 million. At least 50% of the textiles going to landfill could be recycled, but in fact the amount of textile waste reused or recycled annually in the UK is estimated to be around 250,000 tonnes.



The issues

Textiles present particular problems in landfill as synthetic, man-made fibres will not decompose, while woollen garments do decompose and produce methane, which contributes to global warming.

All together, the textile waste produced by households (post consumer), textile manufacturing and retail industries (post industrial) provide a vast potential for recovery and recycling:

- reducing pressure on natural resources
- aiding the balance of payments as we import fewer materials for our needs
- producing less pollution and saving energy, as fibres, fabrics and clothes do not have to be transported from abroad

Reclaiming textile fibres avoids many of the polluting and energy intensive processes needed to make textiles from virgin materials, including:

- savings on energy consumption when processing, as items do not need to be re-dyed or scoured
- less effluent, as unlike raw wool, reclaimed wool does not have to be thoroughly washed using large volumes of water
- reduced demand for dyes and fixing agents and the problems caused by their use and manufacture

The politics

- No specific legislation exists to regulate or encourage the recovery and recycling of textiles in the UK.
- However aspects of the global textile industry are very political, with some of the largest international clothing companies accused of selling clothes made in 'sweat shop' conditions abroad. Workers may suffer long working hours, poor working conditions and very low wages.



The solutions

Collect waste textiles for reuse and recycling. At present the consumer has the option of putting textiles in 'clothes banks', taking them to charity shops or having them picked up for a jumble sale.



There are about 3,000 textile recycling banks nationwide, but these are only operating at about 25% capacity. Clothes are given to the homeless, sold in charity shops or sold in developing countries in Africa, the Indian sub-continent and parts of Eastern Europe. Any un-wearable items are sold to merchants to be recycled and used as factory wiping clothes.

Waste textiles can also be recycled into new cloth through a process of fibre reclamation. Material is graded into type and colour then shredded into 'shoddy' (fibres), which are then spun ready for weaving or knitting. The colour sorting means no re-dyeing has to take place, saving energy and cutting pollution.

Take action

- Take your used clothes to a textile bank. Contact the recycling officer in your local authority if there are no banks in your area and ask why? They may collect textiles through other means. Alternatively you can take used clothing to local charity shops.
- Give old clothes, shoes, curtains, handbags etc. to jumble sales. Remember to tie shoes together as single shoes are impossible to reuse.
- Buy from charity shops and avoid cut price clothes from major retailers who source their stock from factories abroad with poor labour rights for their workforce.
- Buy things you are likely to wear for a long time – a dedicated follower of fashion can also be a green one if items are chosen carefully.
- Look for recycled content in the garments you buy. This should be on the label, though at present there is no standardised marking scheme.
- Buy cloth wipers instead of disposable paper ones as they can be used repeatedly.

Make your own recycled rug

A great way of recycling unwanted fabric is to use it to make rugs and mats. 'Hookie and proddy' are not the names of two new cartoon characters! They are in fact the style of rug making described below which began in the Yorkshire Dales in the 18th Century. At this time the Yorkshire Dales was the centre of lead mining and the miners' cottages were made of stone with flagged floors that were very cold. Mining families could not afford to buy carpets and rugs so they started making their own using whatever scrap material they could find. The fabrics were cut into strips and then worked into a base made from Hessian sack cloth. Hessian was widely available as this was the main way of packaging foodstuffs such as vegetables, sugar and flour. The oldest surviving rag rug is said to have been made from uniforms worn at the Battle of Waterloo in 1815.

You will need

- A hook for pulling the material through the hole
- A knitting needle or similar to prod the material through the hole
- Hessian cloth
- Coloured fabric
- PVA glue



Note that traditional hooks are hard to come by, try antique shops or craft shows. Hand made hooks and prodders are available through Heather Ritchie's website www.rugmaker.co.uk. Alternatively, try crochet hooks. There are a wide range of sizes available from craft shops.

What to do

- 1 Cut out the Hessian to the size of the mat or rag you wish to make.
- 2 Cut the fabric into strips 3cm wide.
- 3 Use either the 'Hookie' or 'proddy' technique to work your fabric into the Hessian base.
- 4 Hookie involves holding the strip of cloth behind the Hessian and pulling a loop through with a hook. The ends of the fabric strip are knotted to prevent it being pulled all the way through the Hessian. Hookie produces a smooth effect.
- 5 Proddy is similar, but the ends of short strips of fabric are pushed through the holes in the Hessian from behind with a blunt instrument, leaving the loop at the back. Proddy creates a textured, deep-pile, shaggy effect.
- 6 Use different coloured fabric to create designs and pictures in your rug.
- 7 When you have finished glue a piece of fabric to the back of your rug to prevent fraying.



For inspiration and ideas for your rug-making project visit www.rugmaker.co.uk and look at the amazing work of master rugmaker Heather Ritchie.



Examples of modern day rugs made by Heather Ritchie



MAKE DO AND MEND!

Did you know...

During the Second World War clothes and materials were in short supply and had to be rationed. This was because the people who made clothes were busy making military uniforms and ships carrying cloth and goods into the country were often targeted and sunk during their journey. During the war they began handing out clothes coupons to family's to ensure the shortage of material and clothes didn't become too critical.

The phrase of the day became "Make do and Mend!" This involved taking old clothes and fabric and mending or altering them as needed so there was little waste. Old pillowcases could become baby clothes, scrap squares of material could be stitched into quilts and ladies dresses could easily be cut off at the waist and made into blouses. The possibilities were endless!

Unfortunately material is still wasted today whereas old clothes and fabric could easily be turned into something new and fantastic!

Here are a few ideas

- an old pair of jeans could easily be made into a trendy new bag
- shirt pockets can be unpicked and sown onto a curtain for handy storage
- an old or damaged table cloth can be cut up and made into napkins
- old boots, gloves and socks can even be used to make plant containers
- and of course there is always the age old sock glove puppet!!

But remember if you can't use old fabric or clothes somebody else can. So simply bag them up and send them to your nearest charity shop.

The activities on this page link to national curriculum areas such as art & design for key stage 1 & 2.

SUSTAINABLE FASHION

Aim

To compare the human and environmental cost of producing two T-shirts, one made by a high street chain store and another from an ethical clothes company.



Preparation

Ask groups / individuals to bring in a T-shirt from any high street store. Ensure that the label is present so you can check the country of origin and the materials used to make it.

What to do

This task should run over two classes. In the first class, use the information given below as a starting point for research into sustainable fashion and then answer the questions comparing the two garments. In the second class the students should present their findings and have a group discussion on the issues raised.

Questions

1 Cost, presentation/branding and packaging of the T-shirt

- How much does each T-shirt cost?
- How are the T-shirts presented/branded?
- Which T-shirt do you prefer? Explain your answer.

2 Investigate and discuss the workers who made each T-shirt and their working conditions. Consider the following:

- age of workers
- days / hours of work
- pay
- workers rights (eg sickness pay and holiday)
- working environment

3 Environmental cost of the T-shirt

- Does the production of either T-shirt pollute the environment in anyway?
- Which T-shirt Company is more environmentally friendly? Why?

4 Looking at both companies who are the winners and the losers?

- Think about the producer, manufacturer, and retailer to help you answer the question.

5 Now you have completed the activity, which company would you buy from and why?

Shima's story

Shima is 17 years old and works in a clothes factory in Dhaka, Bangladesh. When she was a child of just 13 she left her home and school in a rural area to work in the city, not because she wanted to but because she needed to support the rest of her family.

Her job is to punch and stitch buttonholes in jeans and she earns about £4.00 per week. She works from 8am to 9pm, and has one day off per week. The factory she works in is very hot and has no fans to cool the workers. There is no fire equipment on the stairs.

Shima lives in a very poor and dangerous area of the city, and does little outside of work other than sleeping.



Background information

The real cost of fashion

In the U.K. alone we spend an estimated £300 billion a year on clothes, but only a tiny fraction of this money makes its way to those who actually manufacture the clothes. It has been estimated that for a pair of jeans costing £30, manufacturing workers receive just 0.5% of the total cost, that's only 15 pence.

The fashion industry is heavily reliant on chemicals. For example, cotton crops are sprayed with a quarter of the world's insecticides, many of which are highly toxic to humans and wildlife. It takes about one cupful (150 grammes) of pesticide to make enough cotton for just one T-shirt. In addition, it is estimated that at least 8,000 chemicals are used to turn the raw cotton into the clothes, towels, bedding and the other items that we put next to our skin every day. Other processes used to make clothes and textiles such as dyeing also use damaging chemicals.

Some designers are now looking for alternatives, and ethical traders, organically grown materials, and recycled or retro fashion could provide the answers.

Ethical trading

Ethical trading means that companies ensure that the basic labour rights of their employees, and the employees of their suppliers in the developing world, are protected. Companies also take care to protect the environment in the production, packaging and distribution of their products.

Ethical clothes companies often describe themselves as 'sweatshop free'. A sweatshop is a term used to describe a business with poor working conditions. Often the employees will endure low wages and long hours, with few health and safety procedures in the workplace. Sweatshops may even use child labour.

Organically farmed

An organic clothing farmer will ensure that no pesticides or other pollutants are used on the crops, and that minimal damage occurs to the environment. Organic farming improves the soil fertility, is better for wildlife and causes less pollution

from sprays. Organic farms also have higher standards of animal welfare.

Fairly traded

By buying direct from farmers at better prices, helping to strengthen their organisations and marketing their produce directly through their own one world shops and catalogues, charities have offered consumers the opportunity to buy products bought on the basis of a fair trade.

Recycled fashion

Recycled fashion is clothing, which has been made from recycled materials, for example, a plastic bottle can be recycled and used to make synthetic fleece, or even old clothing which has been made into new garments. However, recycled fashion is also confusingly, clothing which hasn't changed in appearance but has had a previous owner.

Reuse/ recycling – retro fashion

Many high street clothes shops are now selling second-hand clothes. Carefully selected items with a 'retro chic' appeal are given a new lease of life and resold alongside new garments. While reusing clothes in this way is good for the environment, buying second-hand clothes from charity shops will also mean that the profits get used for a good cause. TRAIID, which stands for Textile Recycling for Aid and International Development, is one such shop. It is a registered charity which collects, recycles and sells second hand clothes and shoes to fund projects for some of the world's poorest communities.

USEFUL WEBSITES

www.labourbehindthelabel.org
www.youthtearfund.org/lift+the+label
www.nri/InTheField/India_pests

ETHICAL CLOTHES

www.peopletree.co.uk
www.gossypium.co.uk
www.eponasport.com

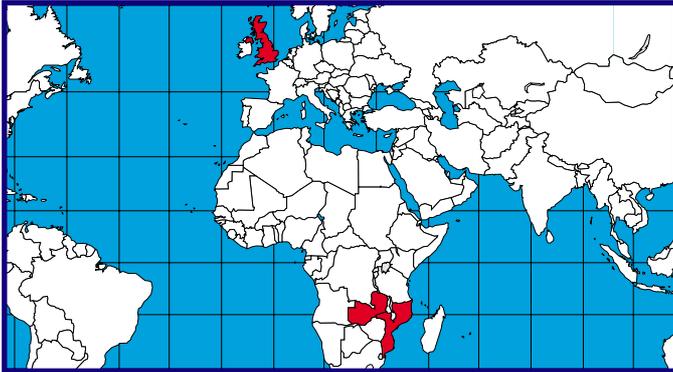
Sources: Soil Association, Allen Woodburn Associates Ltd, Labour behind the Label, Youth Tear Fund.

This activities on this page link to national curriculum areas in citizenship and geography.



Focus on clothes recycling

Recycling banks are becoming an everyday sight on our streets. Increasingly, alongside the containers for glass, cans and paper you may see a special recycling bank for old clothes. Follow us on a trip to Africa as we look at what could happen to the clothes you recycle.



Britons throw out about 1 million tons of old clothes every year. Unfortunately, much of this goes straight in the dustbin and ends up being buried in landfill sites. However, an estimated 200,000 tonnes of clothes are recycled to be worn again or used by industry.

In the past, it was common for old clothes to be donated to local groups to be re-sold at jumble sales. Today, we have the additional option of depositing our old clothes in special clothes recycling banks. These banks are often owned by charities. When we put our old garments into one of these recycling banks we ensure that the charity owning the bank gets a share of the proceeds. However, there are many clothes recycling banks that are run purely as commercial operations and do not benefit charity at all.



The charity Scope works to help sufferers of cerebral palsy and has about 900 clothes banks around the UK. Scope owns most of these, though 140 of the banks are owned by companies licensed to use the Scope name. For each bank carrying the Scope logo, the company makes a donation of £100 a year to the charity.

From charity shops to Africa

Many more clothes are donated to charity shops than can be re-sold. It's estimated that only about 10-20% of the clothes donated in Britain are sold and worn again. The surplus is often sent to other countries where the

clothes are really needed. The clothes are weighed and inspected not just for their condition, but also for their suitability. For example, light summer blouses are perfect for hot countries whereas winter overcoats are not. Usually the clothes are packed into containers and sent by ship.

Zambia

The journey from the UK to Africa can take up to 2 months, when the ship arrives from the UK in Beira in Mozambique there is a lot of excitement as people have often slept out on the docks to be first in line for the bundled-up clothes. The clothes may then make a further journey by truck to the markets in Zambia, which is one of the main recipients of clothes from the UK.

With average earnings of only one or two dollars per day, most Zambians cannot afford new clothes. But Zambians, like most people, take pride in their appearance and wearing good clothes, even second-hand ones, is an important part of their self-esteem. Development workers in the region agree, adding that it is better to sell the clothes than to give them away as constant handouts are demeaning for the people.

Salaula

Zambians call the second hand clothes business salaula which literally means to rummage in a pile. Usually bundles of clothes are bought by clothes traders to sell in the markets. The industry is a major employer providing jobs from carrying and sorting the clothes, to selling them on the individual market stalls.



The flood of imported clothes has had a downside for the Zambian economy, causing the collapse of the Zambian textile industry. In the seven years before 1993, 51 of the 72 Zambian clothing manufacturers closed down. However, Karen Tranberg Hansen of North Western University in Illinois argues in her book *Salaula* that poor economic management and high inflation were the real culprits.

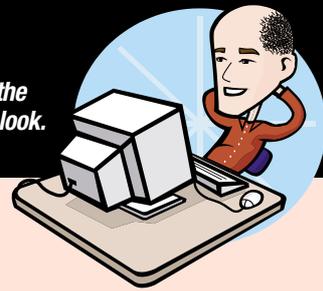
Most Africans are happy with salaula, but some cannot understand why they have to buy the clothes in Africa if they have been given away in the UK. Charity sources in Britain insist that giving the clothes away is unrealistic, because of the cost of sorting, packing, baling and shipping them. A senior executive from one charity has said selling the clothes "generates jobs, helps the micro and then the macro economy and makes the best use of donated items. Charities have to operate efficiently, like businesses. It's not aid or trade, it's trade for aid".

Source *Guardian*; 25/02/04.

TEACHERS' RESOURCE

useful resources

All the information you need is out there on the internet – somewhere! We tell you where to look.



Waste Online

This should always be the first website on your list for information on all aspects of waste or recycling. There is a huge selection of facts and figures, regularly updated by the Waste Watch team. One gem is the great information fact sheet on textile recycling. Top drawer!
www.wasteonline.org.uk

Rug maker

This is the website of master rag rug maker Heather Ritchie. Over 25 years, Heather has refined her technique and is now an internationally renowned artist. There is a gallery of her work showing the amazing detail she is able to capture in her rugs, along with a range of courses and products to help the novice rag rug maker achieve the best results.
www.rugmaker.co.uk

Charity Shops

How do charity shops help the environment? How do charity shops contribute to textile recycling? How do charity shops contribute to other forms of recycling? Just a few of the questions answered on this website dedicated to all aspects of, you guessed it, charity shops! If you fancy giving some time as a volunteer this website has got that angle covered too!
www.charityshops.org.uk



Textiles Online

A good educational resource which aims to explore the processes involved in designing and producing textiles as well as the impact of these procedures on the environment. The textiles part of this website is part of a range of resources provided on education for sustainability.
www.e4s.org.uk/textilesonline

Shoe Friends

The website of LM Barry, a company who collect textiles for recycling and run the 'Shoe Friends' scheme in schools. There are good interactive games to play including one that encourages kids to tidy up a messy bedroom! All in all this website gives some good tips on how the public and business could help the environment through textile recycling.
www.lmb.co.uk

TRAID

Textile Recycling for Aid and International Development, or TRAIID for short, recycles 94% of all donations and collects nearly 2000 tonnes of textiles every year. Can you host a new textile recycling bank or do you just need to find your nearest one? This website also has a very funky style that all fashion gurus and label junkies will approve of.
www.traid.org.uk



Labour Behind the Label

Labour Behind the Label is an organisation campaigning for the rights of garment workers in Britain and around the world. The website provides an interesting insight into the plight of people working in so-called sweatshops and has information on some of the companies lagging behind in the provision of good working conditions for their employees.
www.labourbehindthelabel.org.uk

Imperial War Museum

There are some great resources on this website including the 'Make,



Mend or Spend' game looking at the rationing of clothes during the second world war, and also 'Make do and Mend Toys'
www.iwm.org.uk

Ebay

Ebay is the biggest second-hand shop in the world. Find original vintage clothes, fabrics, shoes and bags here. Someone else's junk could be your new outfit! And remember, buying second-hand is a great way to

decrease our resource use.
www.ebay.co.uk

Recyclezone

Our website designed for teachers and children is proving extremely popular and is packed with games, quizzes and ideas for everyone on how to reduce, reuse and recycle our waste.
www.recyclezone.org.uk

It's out there on the internet – scarecrows galore

One of the oldest uses for unwanted clothes in the UK has been for making scarecrows. It's a simple idea, just take a few old clothes, stuff them with straw and hey presto! You have 24-hour protection against unwanted flying visitors, intent on eating vulnerable seedlings.



Increasingly though, scarecrows are invading towns all over the world for so called 'scarecrow festivals'. From Yorkshire to Chicago and the Australian Outback, the streets of certain towns and villages have been filled with scarecrows. One festival in Newport, USA claims to have over 200 of the straw-filled visitors. Another in the UK is inundated with scarecrows that look suspiciously like famous cartoon characters.

The scarecrow has certainly captured our imagination and regularly crops up in campfire tales, books, films and even ghost stories. In the techno age of the 21st century its good to see our old friend the scarecrow even making it into computer games created with Flash software.

www.bbc.co.uk/wiltshire/content/articles/2005/03/30/lacock_scarecrow_trail_05_feature.shtml
www.wrayvillage.co.uk/web scare05/index.htm
www.theskeletonshop.com