

A more sustainable department

Dale Mears, Trust Director of D&T The Redhill Trust, Head of Design at The Carlton Academy

Is our material-eating subject one that can continue with budgets dropping and material costs rising? This is something we started to ask ourselves at The Carlton Academy, Nottingham a few years ago and we've tried to incorporate some changes to how we deliver our curriculum.

Textiles

We used the D&T Association sustainability audit to help us after Mrs Williams completed her certification last year. We found the easiest way for us was to make textiles sustainable, as we had recently set up a brand-new textiles department and knew we had to introduce sustainability from the start. Not only is sustainability covered throughout our curriculum, but our projects are all manufactured from local companies' offcuts and samples.

Our favourite project currently is our KS3 students making food bags to donate to our local Trussell Trust food bank; Mrs Williams, our Head of Food and Textiles, sources offcuts and samples of Hillary's Blinds fabric from a local community centre.

A small yearly donation means we can collect material to use with students. This is a great community project and helps our students to understand real community work. We also use a lot of these

materials for smaller test pieces and projects. Encouraging students to bring in old clothes and materials is also something that can be easily introduced into schemes of learning and something that can work with smaller projects.

Workshops

In the more traditional workshops we use a lot of materials donated from students' parents and local firms, never turning down site materials when rooms are stripped out and renovated. Most of our KS3 curriculum is now skills-based and has moved away from traditional take home projects – something we have found much easier to manage. We use donated timber for any test pieces and even donated or reprocessed acrylic for our plastics curriculum offer. Very little bought materials come into play. We also try and instil an emphasis on being resourceful and not wasteful. Everyone's had that Year 7 who marks out their work in the middle of a sheet of material. How many teachers accept it and how many challenge? We have worked with our site team to ensure we have a full recycling suite of bins in our Design Studio for plastics, glass, mixed recycling and paper etc which has helped to raise students' awareness. We have found that they do use the correct bins if the older school bins are removed.



Food technology

In food we compost food waste, and as part of a regeneration of an outside space we now have big compost bins outside, as well as space to grow our own and we encourage students to use this.

Upcycling competition

At KS4 we've introduced projects that rely on students to upcycle something. I know many departments are starting to take advantage of this and there are many good resources online and on TV to inspire students. This year saw our first whole school Sustainability Upcycling competition where we teamed up with former Dragon's Den star and TV personality Max McMurdo. The students' task was simple: upcycle something at home no matter how big or small, and Max as guest judge decided the winners. We had a huge range of entrants and some excellent outcomes, from upcycled piano stools to upcycled cupboards, and an MP3 speaker cube machined out of an old kitchen worktop and some old electrical components. We've stayed in touch with Max and will be running this competition across the Redhill Academy Trust this academic year – I can't wait to see the outcomes from 10 schools! As Trust Director for D&T a big part of my role is to develop these relationships and opportunities for students.

We also have an active upcycling club where students come and utilise a range of materials.

Through our links with Nottingham Trent University we've been lucky enough to drop off some old acrylic and HIPS scraps to be shredded and replated back into usable sheets. We want to fund our own shredder and replater as part of the development of D&T and to offer some solutions to recycling plastics in school. We are still having to buy materials for Key Stage 4 and 5 projects but are able to reuse a surprising amount year on year or make use of the donated materials previously mentioned.

I guess there is no easy solution and quick win to becoming more sustainable as a department, but small steps go a long way!

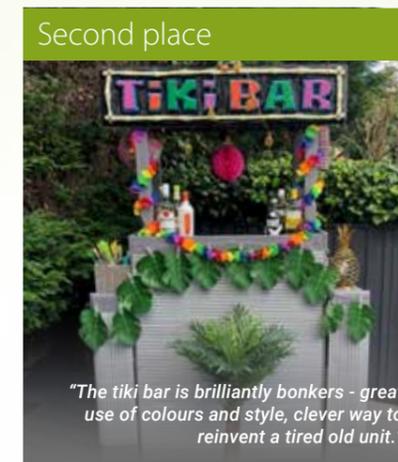
Upcycling competition winners

"Well done to everyone at The Carlton Academy for your hard work on the Upcycling competition." Max McMurdo



First place

"I love the dining chair with bees, great colours, very on trend, great variety of skills shown from upholstery to painting."



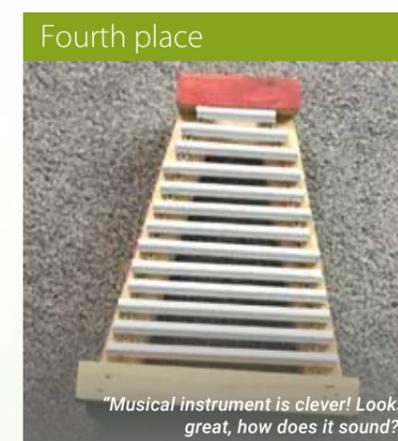
Second place

"The tiki bar is brilliantly bonkers - great use of colours and style, clever way to reinvent a tired old unit."



Third place

"The worktop converted to a speaker looks interesting, love the fact it incorporates technical elements too, nice use of geometric forms."



Fourth place

"Musical instrument is clever! Looks great, how does it sound?"

Other notable mentions

"Upcycled clothing is great! Fast fashion is a real issue, this could be a fantastic little business."



"Decoupage drawer unit is a genius way to reinvent a tired piece of furniture and bring it up to date."

"Distressed and upholstered chest is fantastic, a lot of work to create the shabby chic effect, a great way to save an older item."

