Textiles in Schools: The next generation

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The modern textiles curriculum couldn't be more different from traditional 'needlework' lessons. Students are as likely to learn about making bulletproof vests as they are about making dresses. They handle high tech, engineered fabrics designed by the army and NASA alongside traditional materials. Career routes embrace skills in science, maths and engineering as well as traditional design and manufacturing skills. Things have definitely changed in the classroom!

'Sockie' booklights made out of socks with light up eyes

Academic Rigour and Challenge

Textiles is part of 'Design and Technology' (D&T) alongside Resistant Materials, Graphics, Food, Electronics and Engineering. Figures from the D&T Association show D&T is the most popular non-statutory GCSE subject and the least truanted. Although often perceived as a 'soft' subject where you 'make' things it has great academic rigour that surprises many with a breadth of knowledge that would challenge many science, business and ICT students.

Students learn traditional skills but design for real life contexts other than themselves. They work with traditional and modern materials, industrial machinery and software with opportunities for creativity, innovation and quality previously unobtainable in classrooms. They work as designers and manufacturers researching, experimenting, problem solving and decision making helping them understand the world, and the impact of their choices; something that is crucial for the future.

High Tech Materials

In textiles opportunities are exciting with engineered materials competing with traditional 'hard' materials like metal for strength and durability but with the advantage of flexibility and low weight. Did you know Formula 1 racing cars are made from 85% textiles materials? Not just the obvious stuff like seats but the chassis and suspension which are made from twill weave carbon fibre fabric that starts off on a roll like a dressmaking material.

As well as technical 'performance' materials there are others that are 'intelligent' reacting to heat, light and touch. Electronic sound and light modules can also be integrated into products. Traditional techniques still exist but are more exciting because of these new technologies. A zip, for example, can link to electronic modules making it into a switch when it's opened and closed. This technology has potential for both fun and functional products designed to meet real people's needs such as clothing to monitor health. This gives exciting new dimensions in the classroom taking creativity to a new level.

Boys do Textiles too!

The scientific and technical content has encouraged boys to study textiles and whilst numbers lag behind girls it's a growing trend. D&T subjects, including textiles, draw on knowledge from across the curriculum, especially maths and science, requiring pupils to apply knowledge in practical ways. Students use maths to draft patterns to fit body shapes and consider the science behind engineered fabrics before using them. This couldn't be further away from the pink fluffy hearts image of textiles, which is why many boys (and girls) see textiles as the material of the future.

A Curriculum at Risk

Despite this exciting work and support from business and industry, D&T is at risk. Education changes since 2010 has reduced D&T provision in many schools and a review currently taking place to slim the curriculum could have further impact. If George Osborne is to give substance to his 'made in Britain, created in Britain, designed in Britain and invented in Britain' it is essential D&T remains on the curriculum. To this end the D&T Association, www.data.org.uk, are campaigning to raise

awareness of D&T and fighting to retain it as a statutory subject.

Issues within the subject itself also need addressing to ensure all D&T classrooms, including textiles ones, reflect best practices. The D&T Association are working hard with schools on this including the 'GCSE Textile Rescue' project funded by the All Saints Educational Trust aimed at teachers wanting to improve GCSE results.

Cool bag using technical insulating material

Moving Forward

Whatever happens to D&T on the curriculum it's important parents and the public know what is happening in the modern textiles classroom and the value D&T and textiles has in our society. Indeed, once adults find out about the new exciting developments they will want to have a go themselves!

Over the next few years it will be as common for anyone interested in textiles to use electronic modules and technical materials as naturally as they currently use sequins and denim. D&T as a subject is just 20 years old so many adults think of their own CDT, sewing and craft lessons without awareness of the huge technological changes. With an increasingly high tech and complex world we need D&T in schools to develop the designers, makers and technologists of the future. From a textiles perspective all aspects of the textiles community has to recognise and embrace new technologies whilst also cherishing traditions of the past. The next generation of textiles has truly begun.

Further Information

Julie Boyd is an award winning teacher, author and consultant who runs workshops at Coles Sewing Centre, Nottingham, www.husqvarnastudio.co.uk, on the use of technical materials and electronic components in traditional textiles products giving added functionality and the 'wow' factor. She also sells electronic components for textiles on her website. Visit www.textileshotline.co.uk, www.facebook.com/julieboydonline and Twitter(@julieboydonline).