

# Boldon Brassy!

This feature celebrates some of the outstanding jewellery work undertaken at Boldon School, Tyne and Wear. They have established themselves as category winners of the TDI awards over the last two years. This feature celebrates the wonderful work of their year 10 and 11 students.



## Designing

There is of course really sound structure to the experience of students that builds up their knowledge and skills appropriately. Units of work in year 10 focus on presentation, CAD and Design as well as three shorter preparation units including a copper ring to extend and consolidate manufacturing techniques and design presentation. A focused practical task using jigs and templates and a design and make assignment for a small elegant container completes the trio.

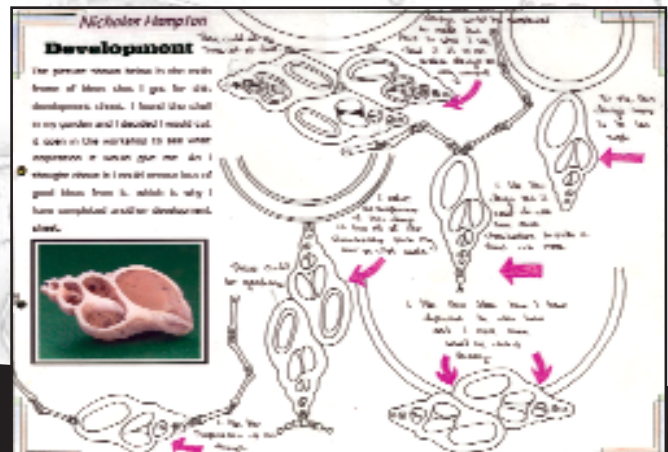
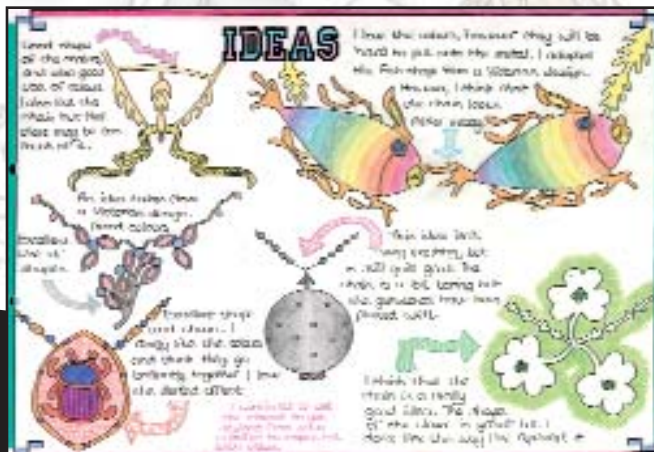
Developing resource material for this kind of work is crucial. Portfolios of photographs, images and contexts are available for students. Collections of physical resources are available to inspire students. Many ideas for them come from nature including stones, seashells, flowers and bones. Students are, where possible encouraged to establish a suitable client for their work. In many cases CAD work (2D) involves rotations and reflections and translations and prior to metal cutting detailed card prototypes are modelled as well as production of templates.



Head of department Ian Wood and D&T teacher Sandra Michejew have to take the credit for establishing the environment, the resources and the opportunity as part of their GCSE resistant materials course. The AQA syllabus in resistant materials is followed by students and one particular hallmark of the course is the quite outstanding portfolio and presentation work. At a time where we are reflecting on the nature of creativity in our subject it is refreshing and reassuring to see such a breadth of creative work allied to high quality presentation skills.



Students can take their inspiration from nature





## Making

The course has developed to include increasing amounts of CAD/CAM work. The D&T area has four Modela MDX15 machines and with good forward planning pupils can progress at their own pace with no time wasted waiting for a milling machine. Most of the jewellery work featured here uses 1mm or .040" thick brass. Milling brass is very time consuming and machines are in constant use. Typical cutting parameters are as low as 0.1mm depth of cut per pass and 1-2mm/min horizontal feed rate. Fine work and often small work demands a really firm double sided tape fixer and detail engraving and milling out pockets or cavities is done prior to cutting out the profile outline.

Gemstones used are in most cases the Cabochon stones available from Teaching Resources and cold enamelling resins are mixed in small quantities as required, two parts colour resin to one part hardener and carefully applied by 'running' the resin down a cocktail stick into the milled cavities. One of the most effective treatments for students work has been the nickel plating of the brass pieces. Plating is done in this instance by a local metal finishers free of charge. However, schools can easily source low cost electrolytic and electro-less plating kits.

The quality and creativity possible with just a few processes and a limited range of materials should prove an inspiration for colleagues contemplating introducing some jewellery design work.

**Thanks in particular to Ian and Sandra and the students of Boldon School and also to Mark Smith the technician for some of the stunning photographs in this feature.**



On display: the finished jewellery design work from Boldon School could easily be admired on display in the window of any high street jeweller.

