

Caterham School

3D design



Ben Wilkinson joined Caterham School in September 2006, to head up a new 3D Design department with the task of teaching design through an Endorsed Art and Design examination. Numbers in design and technology were dropping and although grades were good, it was a male dominated area. The school hoped this change of approach would re-invigorate the subject, bring in more female students and be a better fit within the Art and Design Faculty. Ultimately the place of the subject within the school was at stake!

It was a damp Tuesday morning at the start of September when I found myself standing in front of fourteen eager but confused Year 10 students who were all wondering what they had signed themselves up to. I probably didn't help matters when I introduced the first project 'Re-Think / Re-Use', based on work I had just seen at 100% Design. I challenged pupils to take an everyday object and re-design it into another product, thus extending its life. After seven weeks they had to present their products in a Dragons Den-style

situation – a hard task when they had never had to justify their designs before. We all learnt valuable lessons throughout this project and it proved to be a great way to kick-start their GCSE. Twenty months and four projects later the same pupils

were mounting their work for moderation and the end-of-year Art and Design show. Year 12 students were doing the same for their AS course.

Starting a project is always difficult with pupils not always knowing where to begin. In 3D Design we use themes, gallery visits and relevant critical studies to start things off. For example:

African Art: Carved African masks and sculptures; visit to the British Museum; Picasso and his African influences.

Structures: Modern architecture - Zaha Hadid, Daniel Libeskind; Furniture - Ron Arad, Bauhaus, Marcel Breuer, Philippe Stark; Fashion design - Issey Miyake, Yohji Yamamoto; Natural Forms - Golden section, seed pods, shells.

These are just starting points and pupils soon travel in different directions, depending on their interests. I try not to restrict their ideas as I feel it's important for them to have ownership of their individual work – a more risky way to teach but it gives pupils the freedom to be creative. All research and development work is recorded in sketchbooks and design outcomes can be scale models or full-size prototypes. Some pupils feel restricted by sketchbooks but I'm a fan as all their work is kept in sequence, even the scruffy bits which are often the most informing and interesting parts.

Introducing AS 3D Design was perhaps an even tougher proposition as the first group of students had design and technology 'glasses' on for most of the year. The demanding requirements and the lack of time made it a struggle for all of us, but it has been very rewarding with surprisingly high quality ideas and outcomes. The students coped far better than me with the eight-hour practical exam! All work for GCSE, AS and A2 is internally marked and moderated with a sample being externally moderated by a visiting examiner. The projects are given marks for recording observations (first- and second-hand research, drawings, photos, etc.), analysis/critical studies, development and final outcomes.

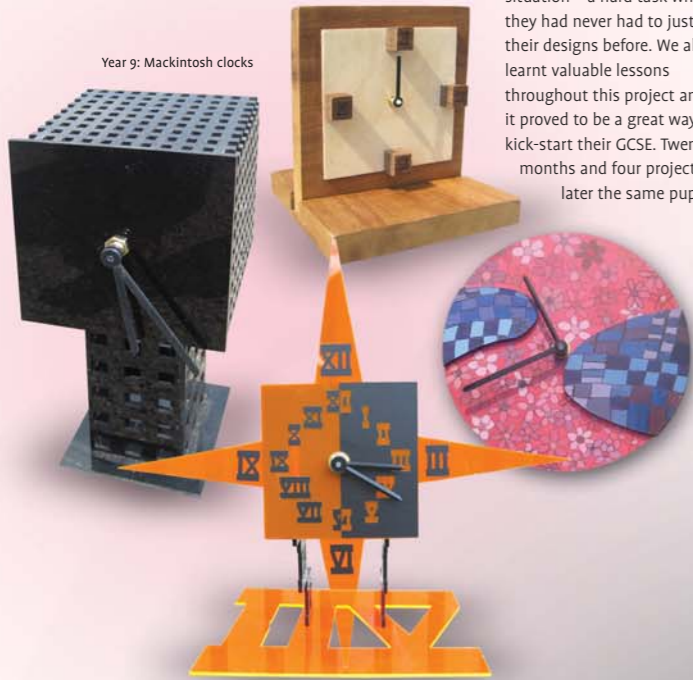
So was it worth it? I can definitely say, with hand on heart, an unequivocal 'yes'. I am passionate about design in all its forms and any course that is so open-ended with complete freedom over briefs and process is a good thing, as it encourages high levels of creativity. Is it better than design and technology? That's a different question and one that I find difficult to answer, as having taught both I can see that they each look at design from different angles and may suit different people and circumstances. I would however, point to the constraints of the D&T assessment scheme as a significant issue. What I can say is that it seems to be working at Caterham School with GCSE numbers up by 80% on two years ago and Year 13 students telling me they wish they'd had the 3D Design option.

At the end of the Summer term I always wish I'd had more time and question how the year passed so quickly, but this year I'm wondering where the last two have gone! ■

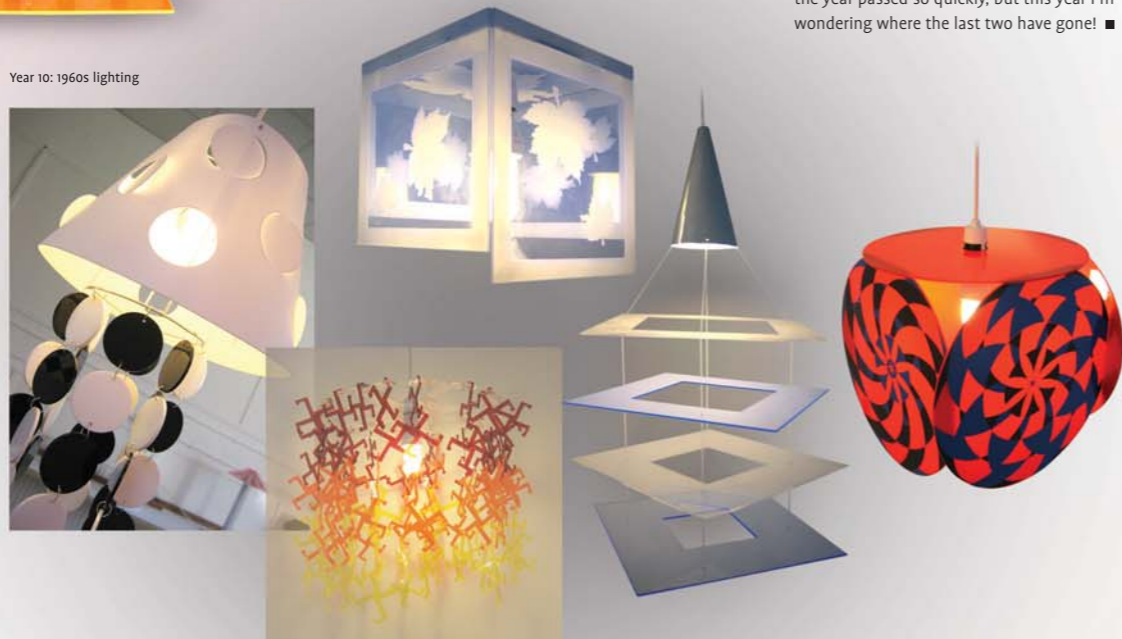
GCSE coursework pieces



Year 9: Mackintosh clocks



Year 10: 1960s lighting



AS coursework pieces

