

Question	Notes
INTENT	
Describe the curriculum design and state why have you done it that way?	The curriculum is mainly skills based in KS3 with a heavy focus on developing a child's confidence using hand tools and developing their ability to carry out a variety of practical tasks. By the end of KS3 the iterative approach to learning practical skills should then allow them to apply what they have learnt in a variety of different situations. At this point the pupils are entering KS4 and the design process can be introduced. This requires a lot of prior knowledge by the pupils and their ability to suggest methods to complete tasks and work independently.
How have you secured a "broad and balanced" curriculum?	Within design and technology a variety of different projects have been designed to offer a range of skills and processes. This allows all pupils an opportunity to excel within any given area based on their individual interests and abilities. For example a CAD/CAM module involves a lot of computer base work with little need for hand skills but a greater understanding of the limitations of the equipment used to manufacture a product and how to get that equipment to make specific things. Compared to a wood working project where pupils would need to measure, mark and make cuts in wood using hand tools requires a completely different set of skills and understanding.
What are the important things they need to know before they leave Elmwood?	The pupils at Elmwood need to know that the kinds of tasks they complete not only allow them to develop transferrable skills for later on in life such as problem solving skills and fabrication skills, but there are jobs out there that will suit individuals with a keen interest in the Design and Technology area. As mentioned when the pupils get older and move into their own homes they may have DIY jobs that need to be completed. Design and Technology should have equipped them with the confidence to attempt a variety of tasks. Pupils are always encouraged to keep their areas tidy and reduce waste. They are encouraged to make gifts for loved ones and even upcycle old products in their activity time in Design and Technology.

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<p>How is the curriculum sequenced (long, medium, weekly, daily) and why do we do it that way?</p>	<p>The Design Technology curriculum is broken up into a series of progressive projects which build on previous skills and knowledge. Each project in KS3 is designed to last no longer than a half term and each project may have several focused practical task opportunities within it to help further develop understanding of the topic. In KS4 the projects utilise the pupils' knowledge and as a result they are expected to work more independently. The projects are a lot more complex and as a result take up to a term to complete. The main reason for this is also to help further develop their resilience within the subject. It takes a lot of self-control and focus to complete a large multi skilled project and at the start of KS3 the pupils desire "quick wins" over complexity. As they move through the subject year in year out, the projects get more challenging and bigger and their need to finish something quickly to move on soon disappears and they get satisfaction from completing tasks within the topic to a good standard.</p>
<p>Is there an example of where the curriculum builds on knowledge and skills?</p>	<p>Throughout the whole curriculum there are opportunities to build knowledge and skills. For example in year 9 the pupils are taught how to create a basic frame out of wood. The following project then relies of this prior knowledge to get the pupils to create a different frame to start off a completely different product. The pupils will have an understanding of how to measure, mark and cut wood and be able to at least identify all of the tools and equipment to do so.</p>
<p>How successful is the curriculum, and how do you know this?</p>	<p>Success within Design Technology is measured by the pupil's ability to be able to complete a task independently, identify ways of completing tasks and even suggest better ways of doing things. This prepares them for leaving Elmwood so they can utilise the skills they have acquired. By the time pupils get to KS4 the projects which are in place lean heavily on testing these key personal attributes. The projects would not work if the pupils couldn't demonstrate at least some of these key qualities within every project. There have been pupils that have left Elmwood with a glowing portfolio of skills who</p>

	have really won over college tutors in interview and gone on to successfully complete their college courses and even volunteer as a technician in their spare time.
How innovative is the curriculum?	Within Design Technology we try to be as innovative as possible, listening to the needs and wants of the pupils as well as trying to introduce new technologies and find new ways of demonstrating skills and using them in different ways. As a result, the subject does not stand still and is constantly evolving and moving forward. Pupils are offered opportunities to work with metal casting, laser cutting, 3D printing pens as well as the up and coming use of iPads to support their learning and design 3D models to print on our makerbot 3D printer. The curriculum used to mainly revolve around wood working, this is still a big part of the curriculum however it has been made more diverse and inclusive of new technologies. Listening to students I have recently created a brand new “robot toy” project as a result of them brain storming the kinds of things they want to make in lesson.
IMPLEMENTATION	
How do you keep abreast of new developments?	Subscribed to mailing lists and I am part of several closed Facebook groups who specifically discuss the subject and new and exciting ways of delivering it. I liaise with another teacher of Design Technology at a different special school to discuss projects and developments. I am always keen to continue to develop my subject knowledge as this is a keen interest of my own which I enjoy cascading down to the pupils.
Are there any published schemes of work you use, if so why?	At this moment in time the schemes used are all developed in house in order to fully cater for the needs of the pupils at Elmwood. Design and Technology schemes are not as developed as the ones in core subjects. The forums I am on are keen on sharing projects and knowledge.
What schemes are you currently working towards, and what resources are you using?	I am currently working towards schemes that fit within a 5 year framework. The purpose is to develop knowledge and understanding

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	<p>of tools, equipment and materials in order to manufacture products. In order to do this a wide variety of resources are required from physical materials such as woods, metals and plastics. Hand tools as well as CAM machines such as laser cutters and 3D printers. The introduction of iPads will also mean the pupils can start to present their work in ways they have never done so before. They will be able to complete a task, use the iPad to photograph it and then annotate it all on a single iPad. Each iPad will hold the pupils work and be able to show their progression over time.</p>
How effective is teaching?	<p>One member of staff teaches the whole subject so the standard is consistent for all classes. As a result, teaching practices can be modified quickly and easily for example if one group finds something challenging it can be adjusted for the next group. This has a positive impact on the teaching as it has been graded as consistently good.</p>
How do you ensure that pupils understand and remember information?	<p>Every project uses skills, and knowledge they have already gained/used previously, therefore this iterative approach to learning means that over time the pupils remember key information within the subject. Displays are used for example to jog a pupil's memory on selecting the correct equipment. Photographs are taken of pupils work and used in presentations as well as working drawings etc to help pupils remember information.</p>
IMPACT	
Does the curriculum lead to good results?	<p>In KS3 70% of pupils are making at or above expected progress, with 17% of that cohort making above expected progress. In KS4 86% of pupils are making at or above expected progress, with 83% of that cohort making above expected progress. Through having consistently good teaching we achieve consistently good result in Design and Technology.</p>
Does learning over time show appropriate challenge, how do you know?	<p>Yes, year in year out the projects within the subject become bigger and more challenging. This is known as they are designed as such and by the time pupils are in KS4 they have enough knowledge to create products independently and even support the lower years</p>

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	with their learning (this is seen during Friday afternoon activities when KS4 pupils are in the workshop at the same time as KS3 pupils and they relish the opportunity to support their peers).
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