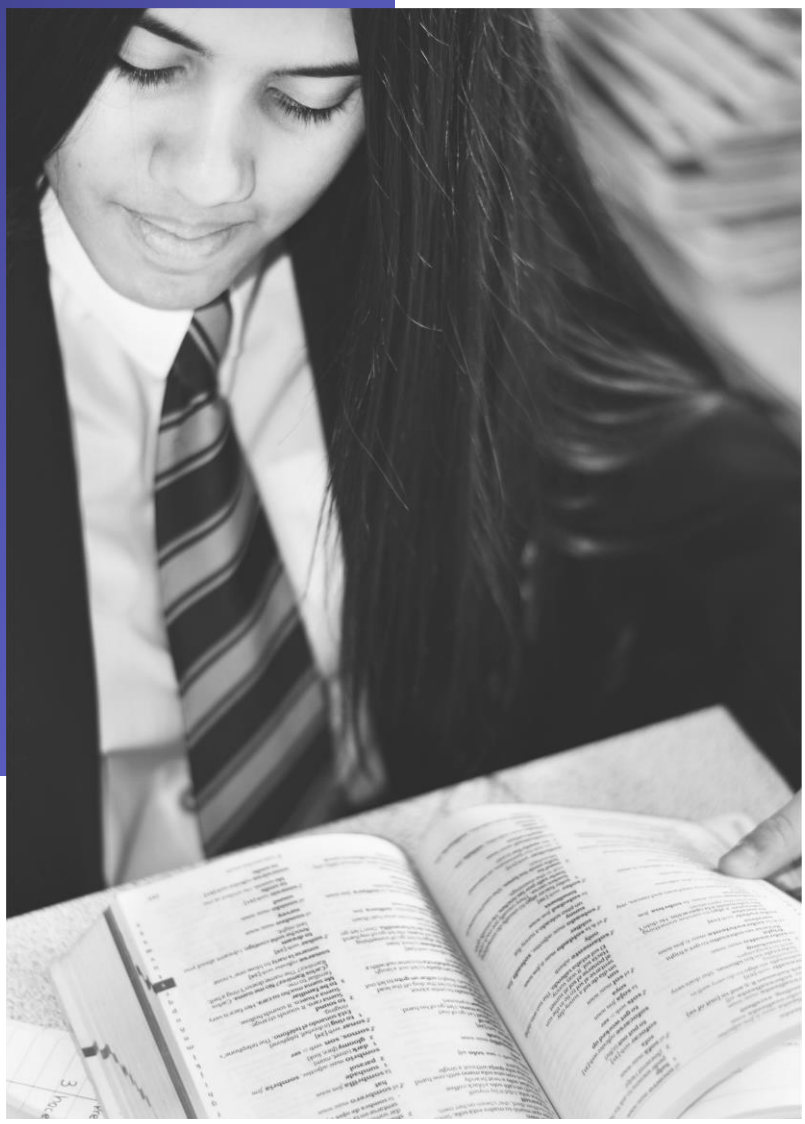

## Curriculum Rationale

# Department of Design and Technology

This document aims to inform parents of the knowledge and skills their children acquire and why they learn what they do over the course of their five years in Salendine Nook High School.

## Our Vision/Intent

At Salendine Nook High School, we strive to equip pupils with the skills and qualifications to go on and become the next generation of creative practitioners in their chosen field. We want them to make a positive difference, designing and creating a brighter future for us all to enjoy.

We do this by building confidence, encouraging pupils to take ownership of their work and to become resilient problem solvers who are creative and innovative. We have no doubt that we work with the next James Dyson, Jonathan Ive or Ray Eames and we endeavour to harness the talents in each and every one of our students so that they can reach their potential and make a positive difference to the world in which we live.

Our learners develop an appreciation for the social, moral, environmental and cultural issues related to design as well as technical and practical competencies. We also develop the wider skills that are valued by employers such as resilience. This provides students with the broadest possible range of career opportunities available to them when they leave education.

In Design and Technology, students are able to make practical use of knowledge gained in other curriculum areas and combine this with their designing and making tasks in order to produce high quality products. They evaluate and test their ideas, ensuring that they are suitable for a variety of users from all aspects of society.

We also prepare students for a world in which technology is changing at an accelerating rate. This experience ensures that students are able to successfully complete ever more challenging tasks, embrace rapidly changing technologies and develop into informed and discriminating citizens. Our ultimate aim is that our students contribute to the creation of a better world.

## The Principles which Underpin our Curriculum

Students in Design and Technology learn through a variety of theoretical and practical tasks. Modules of learning are broken down into projects that engage and motivate student's naturally inquisitive minds.

We use ever developing strategies to support the learning and retention of knowledge and skill in Design and Technology. Most of these strategies are derived from educational research evidence such as interleaving, quizzes, competition, repetition/revision, knowledge organisers, tests etc. We couple traditional learning environments (classrooms and workshops) with virtual (online) learning to engage and support the education we provide. We also encourage our teachers to experiment, developing new techniques of their own and to use their personality to help students to learn. Examples of this are storytelling and humour. We understand that relationships are key to the success of our students.

Students have very limited experience of Design and Technology when they join Salendine Nook High School due to the facilities and experience in primary education. We therefore focus on simultaneously developing both knowledge, skill and creativity as rapidly as we can.

We decided the best way to do this is by teaching through projects. By delivering the curriculum in this way pupils learn theoretical knowledge that is related to the physical product they are manufacturing. This makes the theory work relevant and meaningful allowing pupils to apply what they are learning immediately. This is particularly important in order to help boys engage in theoretical work who, generally find this type of work less interesting.

As students' progress through the school, each project builds on the previous one, increasing student's knowledge, challenging their thinking and developing their skills.

We deliver a tailor made curriculum that is relevant to our unique students and together with Food and Textiles, we ensure that all aspects of the National Curriculum are covered. Huddersfield has a strong engineering heritage and so developing links to these industries has been central to the evolution of our curriculum as we want to ensure both relevancy and career opportunities are maximised for our students.

## The Research behind our Rationale

In order to provide a first class education for our students it is critical that our curriculum functions correctly. It must deliver all the requirements of the National Curriculum and meets our unique students' needs. We have therefore consulted with the Design and Technology Association, STEM Learning and the Department for Education guidance for our curriculum content and delivery. In addition to this, we have also liaised with local businesses such as Cummins Turbo Technologies, a local engineering company, which is Huddersfield's second largest employer after the NHS. Furthermore, we understand the importance and relevance of our subject in what is a full and busy timetable. 30% of Britain's jobs are in the construction industry. These careers range from Architects and Structural Engineers to all manner of trades and DIY store workers. The United Kingdom needs a workforce that is full of resilience, intelligence and that can solve problems with pride.

For many years we have worked with our feeder schools and have established strong links with them. This has given us a greater understanding of the delivery of Design and Technology at Key Stage 2 and how best we can support our students when they start with us at Key Stage 3. An example of this is supporting Lindley Junior School with their annual Formula 1 competition. Despite the excellent education provided at primary schools, it is very difficult for them to deliver Design and Technology to the extent that it is at secondary level. Therefore, there is a very steep learning curve for students from the time they join us to the time they leave. For most students, learning in specialist workshops, food and textiles rooms is hugely exciting, yet for others they find it a little daunting. However, due to the skill and experience of our staff, all students very quickly find themselves growing in confidence and thriving in what were previously alien environments.

Design and Technology is a highly challenging subject that demands both academic intelligence and practical skill. The most successful of our students' will also have a strong creative flair. Our curriculum is therefore focused around building these three core aspects: Theoretical knowledge and understanding, practical skill and ability and creativity.

Due to the large amount for our students to learn in a relatively short time, we embed these three core success concepts into project based learning. This way, we can ensure that students embark on Schemes of Learning that they find interesting, deliver the National Curriculum and build upon each other in terms of challenge and knowledge.

## Key Stage Three

Key Stage 3 Design and Technology is based on a carousel model and encompasses Food, Textiles and Engineering. This means that students' rotate around the department, working in specialist rooms with specialist teachers.

## Year 7

As mentioned earlier, the jump from KS2 to KS3 Design and Technology is huge. We understand this and so the Year 7 journey actually begins back in the transition phase.

During the schools transition work with primary schools, we welcome Y6 students into the Design and Technology department. They normally spend two hours working with us in our workshops and classrooms, completing fun and practical tasks. This helps students to feel more comfortable when they arrive with us in September of Year 7.

The Year 7 project: "Handy Hook", is an aluminium hook mounted onto a wooden backboard. The idea of students making this product is to help with organisation and tidiness at home. The wooden backboard has several double sided sticky pads so that students can take the hook home and mount it where they choose with ease.

Students manufacture all aspects of the Handy Hook, learning to cut, shape and drill both metal and wood. This fun project introduces students to the basic tools and equipment in the workshop. These are both hand held and powered tools.

The project starts with an introduction to the workshop environment. Students learn about the exciting opportunities that arise from being based in a workshop as well as the Health and Safety issues that are so important. We teach them about the importance of managing themselves, their legal and moral responsibilities as well as the teacher's legal and moral responsibilities.

When we know that students are both familiar and safe in the workshop, we focus on designing and manufacturing their Handy Hooks. Students start the design process by looking at and evaluating examples that have been made by previous students. This provides them with the opportunity to learn from what works well and what went wrong scenarios. It is OK to fail in D&T as long as you failed by taking on a challenge and learned from it. It's part of the process of designing and manufacturing. A real life example of this is that James Dyson famously made 5,127 prototypes before he managed to launch his first vacuum cleaner. In other words, that's 5,127 failures but with resilience and determination he created a far superior product.

In order for our students to learn to work creatively, we teach them how to research efficiently and how to use inspirational images to create new and creative ideas. Our aim is that students will not simply copy an idea that they like. We want them to use the images that they gather, take elements from them and create their own unique and innovative designs. We want them to learn to develop the skill of generating a variety of different ideas that meet the needs of the design brief. This is a challenging skill and many students struggle with it because once they have an idea they like they become focused on moving forward with that particular one, rather than exploring more ideas. In the design world this is called "design fixation" and it is penalised at GCSE level. After all, if a designer is employed to generate a range of ideas for their client, it wouldn't be acceptable to settle on the first idea that the designer liked – it is up to the client to decide that!

Once students have generated about four different ideas, annotated and evaluated them, we want them to improve the idea. This is done by sketching developments in their book. Finally, students make a card template in order to test the design and to help transfer it onto the wood. The idea is that they are learning to constantly evaluate and adjust their work accordingly which is a fundamental skill that all good designers should possess.

The next step in the scheme of learning is to cover a bit of theory work on wood. This is relevant at this point as students are about to work on the wooden part of their project. It is important for students to know where wood comes from, the various categories and some points about each as well as the environmental impact of using wood.

Students then learn how to cut a piece of wood accurately using the appropriate saw. At this point we interject key and relevant detailed health and safety with regards to each individual piece of equipment that students will use. We prefer to “drip-feed” the health and safety knowledge in as we go at relevant points as it is easier for students to remember and relevant as they will be about to use the piece of equipment.

Students are given several demonstrations or shown instructional videos by the teacher and then undertake the specific task of drawing around their template, cutting their back board and sanding it smooth. The teacher then circulates the room supporting and guiding on a one to one level as required.

The scheme of learning then moves on to the Aluminium hook. Here we cover some theory on metals, again as it is relevant at this point. It is important that students know where metals come from, the various categories of metals and specifically in this project how aluminium is produced and the environmental impact using them has on our planet.

Students then make the hook part of their “Handy Hook”. This is a standard component. I.e. All students’ hooks should be exactly the same. We chose to do this because in industry manufacturers use standard components to keep the cost down and to speed up production times. The teacher gives a series of demonstrations or shows video tutorials of what to do. Health and safety is also delivered at relevant points so that it is meaningful and timely.

Students then enhance the appearance of their backboard. This could be by painting, using coloured pencils and other items such as sequins for example.

The last and final stage of manufacture is assembly. Students learn how to attach the hook to the backboard using pilot holes and screws.  This gives us the opportunity to refer back to the knowledge acquired earlier in the project about the working properties of wood and is a great way to revisit some earlier theory through a practical outcome.

We then ask students to photograph their work and do a simple evaluation so that they reflect on their achievements and any areas that could be improved. Students are also encouraged to provide peer feedback, demonstrating an appreciation for the work of others.

During this project we also go a little beyond the National Curriculum and teach students about two different careers that are related to the project. The first is metal fabrication. There are lots of local companies in this sector in and around Huddersfield and the students enjoy hearing about them. The second career we teach students about in this project is CNC wood milling. We teach them about a local business owner, who we have actually employed as a Design and Technology department to help us manufacture a Y11 students product as we didn’t have the specialist facilities.

Towards the end of the scheme of learning, we want to know that students have learnt what they should have done and we also want them to develop their exam technique. Therefore, at the end of this module they assess their project work with guidance from their teacher using a standardised method and sit a small test. The test is split into two halves, multiple choice and extended writing. This assessment allows students to reflect on their learning and to “plug any gaps in their knowledge” but also allows us as practitioners to reflect on the class’s performance. We can then modify the delivery of our Scheme of Learning in order to do a better job in the future.

# Year 8

In Year 8, Design and Technology, we build upon the knowledge acquired in Year 7. Year 7 focussed on the key design principles of researching, using research to generate interesting and creative ideas, developing an idea as well as analysis and evaluation. Year 7 students also covered workshop health and safety and materials knowledge for wood and metal with a focus on non-ferrous metals. In Year 8 we move along a similar vein in the design skills, but change tack slightly and cover different materials knowledge to broaden the students' experience.

The Year 8 project is to design and make a mobile phone holder. Students really enjoy this project as it is relevant and useful and they are often gifted by the student to someone else such as a parent or sibling.

The Year 8, mobile phone holder project focusses on metals and plastics, in particular ferrous metals (mild steel) and thermoplastics (acrylic). This introduces them to and enables them to work with a broader range of materials, building on the knowledge and experience gained in Year 7. These materials are more difficult to work with and rely on us working with almost entirely new tools and equipment, forcing students to develop their practical skills and experience. Where the Year 7 project was entirely handmade, the Year 8 project is half made by hand and the other part is made using design software and laser cutting. This is an introduction to skills that will become heavily used in KS4 where we will want our students to work as independently as possible.

The materials used in this project have very interesting characteristics as well. The base of the mobile phone holder is made from mild steel which rusts if left unprotected from the atmosphere as it reacts to moisture and oxygen. We therefore introduce students to a variety of finishes for metals and students carry out an industrial process, "Dip Coating", in order to protect and apply a durable and aesthetically pleasing finish to their mild steel component. This dip coated finish is actually a thermoplastic coating and so this supports the other material knowledge acquired in this project. The top part of the mobile phone holder is made from acrylic which is a thermoplastic. This means that it can be heated and reshaped or even heated further and recycled by melting it down and creating something completely new. We teach students about this and after the component is laser cut from a flat sheet of acrylic, students then heat it on a line bender until it becomes flexible and mould it to the desired shape so that it can hold the phone.

Students start this project by learning about why holding a mobile phone in the hand is bad for their posture. Craning their necks down for long periods of time from a young age is medically dangerous and reports suggest that more and more young people are suffering from mild issues such as headaches to more severe problems such as spinal issues as a result. We want to help to educate our students on the safe use of mobile phones but are realistic in that simply saying not to use them as much is not a strategy that will have the desired effect. Therefore, the mobile phone holder allows them to position themselves in a better posture and use their phone in comfort. Students complete a piece of research investigating the hazards of mobile phone use.

Students make a scale model, learning about scale and dimensioned drawings. This not only gives them a basic understanding of orthographic drawings but helps them to understand how their phone holder will work. Just before students start to manufacture their steel base, we deliver the metals theory knowledge. This is a relevant point in the project as we want students to fully understand and appreciate the material they are working with. They will learn about where it has come from and how it was made and its properties. Furthermore, we want them to have an understanding on the environmental impact of using it and whether it

can be recycled or not. The metals knowledge is delivered through both interesting video clips and class discussion.

The group is then split in to two halves. One half manufactures the steel base and the other half simultaneously work independently on the computers, making 3D models of the phone holder. The groups have three 1 hour lessons on each task, swapping each lesson to take it in turns and to keep things fun and interesting.

The steel base is a standard component, reinforcing what was learned in Year 7 about standard components. Students are given demonstrations of each stage of manufacture by the teacher and/or video at relevant points. Health and safety is an important part of this delivery and similarly to Year 7, is interjected at relevant key points so as to be both pertinent and adhered to.

The 3D design software that students are learning is called SolidWorks. It is a professional design package that is widely used in industry. There are free alternatives available but we feel strongly that students should be given the best opportunities and resources where possible and the results from students working with the software speak volumes higher up the school. Many students show a particular interest and skill with this software and we are lucky enough to be able to offer them a home user student licence so that they can continue to follow this passion at home. Several students have even bought themselves 3D printers now. It is a fantastic feeling for us as a department to know that the student enjoyment is genuine and to the point that they want to spend their birthday money on the same things that we ask them to do as "work" in school.

Students learn this software by independently following video tutorials that have specifically been made for this project by the design and technology teachers. They can work at their own pace and recap parts of the video as necessary.

There are several reasons why this part of the project is set up this way with two groups within one classroom, one working on the practical metalwork and the other independently working on the 3D CAD computer work. Firstly, we want to stretch the Year 8's level of independence so equipping them with video tutorials they can self-manage themselves almost all of the time. They are coached before starting the task and given some top tips of how to manage both the software and how to get "un-stuck". We suggest that they try to solve any problems that arise by themselves first by watching the video again but if this doesn't help, they then look to another student that has progressed further than they have in order to get support. If this still doesn't help, they can then ask the teacher. To some this may seem like "lazy" teaching but actually, we are teaching other vital skills. Students need to develop grit and determination and learn not to quit at the first hurdle. They also need to understand that there isn't always a grown up with all the answers on hand. They need to learn to use their initiative and fix problems in a variety of different ways.

Another reason things are set up this way is that some equipment is limited both in practical equipment and computers. The practical equipment is very specialist, expensive and some of the items are very large. Due to these constraints, reducing the number of students doing practical work avoids queues forming and students' learning being held up. It also means that students taking on these challenging practical tasks are able to get a better ratio of support from their teacher. It goes without saying that the other half of the group is constantly monitored and are supervised at all times though and due to the half group scenario, they all have access to their own computer to complete the tasks.

The 3D CAD (Computer Aided Design) work is broken down into five different video tutorials as follows:

1. How to make the steel base.
2. How to make the acrylic top part.
3. How to assemble the two components.
4. How to render (add materials and colour).
5. How to stress test the acrylic part.

These tasks are completed on the computer but students take screenshots of each completed tutorial as evidence of their work. The students must have the evidence printed out and in their books in order to get the marks for the work however. This may seem harsh but it models the demands of GCSE portfolios and we feel that students need learn to complete tasks fully and take some responsibility for them. If they do not manage to, it does affect their grade but this is a very important lesson to learn. It is far better to learn this now at a relatively early stage in their school life, where failure to adhere to these expectations does not result in a hindered future. Put another way; it's better to learn this in Year 8 than on GCSE results day.

When students have completed manufacturing the steel base, they then start to manufacture the acrylic top part. Because this component is to be laser cut out of a flat sheet of acrylic, it first needs to be drawn out on specialist 2D computer software. This software is called 2D Design Tools. Again, students can work very independently, following video tutorials with the teacher circulating and supporting as required. When the drawing is completed, students need to then laser cut their design. The more able students will take on more of a challenge and modify the standard design significantly by being creative with the design they produce.

When the part is cut, it then needs to be bent into shape using the line bender. At this point, we drop in some theory knowledge about thermoplastics and that they can be heated and shaped because they become flexible when they are hot. When students understand the properties of the material they are using, they then heat it and bend it to shape.

The final stage of manufacture is the assembly of the two different components. Students have an idea of how this works because they have seen examples of previous students work and have made themselves an assembled, 3D computer model. At this stage in the project we look at different fixings, their advantages and disadvantages. Students then choose which option they would prefer and use this to assemble their product.

Towards the end of the scheme of learning, we need to assess what students have learnt and develop their exam technique. We follow the same system as with Year 7 and so at the end of this module they assess their project work with guidance from their teacher using a standardised method and sit a small test. The test is split into two halves, multiple choice and extended writing. This assessment allows students to reflect on their learning and to "plug any gaps in their knowledge" but also allows us as practitioners to reflect on the class's performance. We can then modify the delivery of our Scheme of Learning in order to do a better job in the future.

In addition to everything covered in this project, we also teach students about career opportunities that are related to the work they have been doing. We discuss being a CAD designer and a variety of different career opportunities within Huddersfield's second largest employer, Cummins Turbo Technologies such as Machine Operator's to Fluid Dynamics specialists.

## Year 9

Looking back over the curriculum in Year 7 and Year 8, students have had an extremely challenging and broad range of topics to cover. They have learned about wood, metals, plastics, environmental issues, careers and specialist computer software. They have also developed their hand making skills and learnt to use machinery to aid production. This has ranged from hand operated machinery to CNC (Computer Numerically Controlled) machinery that is run from a computer. Year 8 saw us pushing students to become more independent with their learning and learning to manage a more complex project with lots of different facets to it.

In Year 9, we want to build further on the knowledge, skill and confidence that students have gained in Year 7 and Year 8. Therefore, in the Year 9 project they will design and make a portable speaker. This is a very popular project and students are truly passionate about it. Students tell us that they enjoy the project because the outcome is both highly functional allowing them to enjoy listening to their music. We also think that they like the project because it is challenging, providing them with new skills and knowledge such as how to solder the circuit board together.

The projects in Year 7 and Year 8 are designed and made by the students for themselves. In Year 9, we encourage students to work more like a professional designer would, designing and making the speaker for a client. This models real life and forces students to think about other people's needs and wants.

They start the project learning about primary and secondary research. They then carry out real market research, looking at the speakers that are available on the market, evaluating them and where possible, testing them. Students also find a client and interview them with a questionnaire that they have designed in order to identify exactly what they desire. Using this information, students then learn to write a design specification. This is a critical piece of information in the design process as everything hinges on it. At the end of the project, the speakers will be evaluated against this design specification to see how successful the students have been.

Students learn to generate design ideas that meet the criteria of a design specification. This is far harder than in Year 7 and Year 8 where students could just be creative and generate seemingly random ideas from inspirational sources. In Year 9 they have to be creative but within the constraints of the clients specification. Each idea needs to be evaluated against this criteria in order to make sure they meet the clients' needs and wants.

After the design ideas, students learn how to develop the idea(s) that best meet the clients' specification criteria. They will need to consider the materials and the manufacturing processes available to them in order to do this well so they will draw on knowledge and experience gained in Year 7 and Year 8 projects.

The carcass of the speaker is made from MDF (manufactured board) and is a standard component so we recap some of the learning that took place in Year 7 on wood and manufacturing techniques. Students follow instruction and guidance from their teacher in order to manufacture and assemble the carcass. It is down to the students to figure out how to manufacture the rear closure panel. Some students may simply glue a piece of wood on but this means that there is no access to the electronics and batteries whilst others may design a clever system to make it removable. This is a deliberate and enjoyable design challenge and higher ability students can really differentiate themselves at this point. Furthermore, students need to create the actual design that they came up with. Many of them will use 2D Design Tools software so that they can laser cut components or even engrave a pattern onto their speaker whilst others may hand craft parts to embellish

their speaker. Either way is great as far as we are concerned because students are taking a lead on their learning within achievable yet challenging constraints. This confidence in their own decision making will be vital to their success higher up the school.

With lots of components to adhere to the speaker, we teach students about adhesives. This is delivered part way through the assembly, just after the carcass is assembled because it is relevant at this point.

Students need to understand basic electronics as part of the National Curriculum and it is fantastic to teach this through a practical project and not just the theory. After the carcass is assembled, some students start to put their circuit together whilst others are doing other aspects of manufacture. We need to do this so that there is enough equipment for everyone and to reduce the queuing time at equipment that is limited. This creates a hive of different tasks all happening simultaneously and although it is challenging to manage this environment it is fantastic to see the students so busy and enjoying their learning. Before any student commences with the circuit assembly however, the whole class has some electronics knowledge and learns how to solder properly by watching an engaging video. We choose to deliver the soldering technique this way because the video can be displayed very large on the smart board and the camera can show the details precisely.

As the practical work comes to completion, it is time to assess the skills and knowledge of the students. We do this in the same way as Year 7 and Year 8 so that students are aware of the exact criteria that we are looking for and can identify easily where they can develop themselves and where they have succeeded.

## Key Stage Four

We deliver the AQA's, Design and Technology course. The AQA have long been a highly regarded exam board and we have good experience working with them. The GCSE course they offer is challenging, interesting and offers students a broad range of potential outcomes so they can study materials that are of interest to them.

Our usual student profile for the uptake of this subject is very diverse from low ability to high. Many students are very academically gifted whilst others struggle in this aspect. We therefore needed a course that can suitably stretch and challenge all students. We also have many students that enjoy the practical aspect of Design and Technology and that will undoubtedly go on to hold a career that is practical in nature so we need a course that has plenty of practical built into it.

The GCSE Design and Technology course is 50% NEA (Non-Exam Assessment), commonly referred to as "coursework" and 50% written exam that is taken at the end of the course. Being 50% coursework has advantages and disadvantages. Students have a huge amount of work to produce but they can do this over a set period of time, usually several months. This in itself poses challenges as some students struggle to stay motivated and up to date. We have procedures in place to assist with this and are seeing improving results year on year.

## Year 10

Year 7, 8 and 9 saw our students developing their knowledge, skill, creativity and importantly their confidence so that they become more independent and able learners. We saw theory work broaden their understanding and practical work that developed their skills. Combined, these attributes give our Year 10 students the foundation that they need to move on to the rigorous GCSE course where material, design and practical skills become more complicated and advanced.

We deliver each and every single aspect of the exam boards specified knowledge criteria through projects in Year 10. Every project that teachers deliver has the exam boards specification criteria plotted into it. This ensures that the theory side of the work is kept interesting and relevant to what the students are working on. Equally, it enables us to develop the students design skills; a similarly important specification criteria from the exam board.

Each project has its own focus and our teachers may deliver different projects to others due to the facilities available in their particular workshop or their own knowledge, skills, background and interests. After all, it is vital that teachers can enthuse their students.

At the end of each project, students assess their work against the exam board's criteria so they develop an understanding of what the exam board is looking for as well as where they have achieved and can improve.

Theory work, in preparation for the exam, is built in and tested at the end of each project. This is done through an end of unit exam that is taken in test conditions.

One of the projects, normally towards the end of Year 10 is a small, practice coursework project. This enables us to teach students what is required for their NEA assessment in more detail and it gives them a chance to

apply all the experience they have gained over the last few years before commencing their actual GCSE coursework.

On 1st June of each year, the exam board releases what is referred to as the “contextual challenges”. These are three different starting points for projects. Students must choose one of the tasks as their coursework project. An example contextual challenge is: “Healthy lifestyle in 2020”. As you can see, these are very broad starting points for a project and offer students great opportunity to go where they want to go with it. This coursework continues into Year 11 and finishes around February half term of Year 11.

Our students also sit a yearly full mock exam. This is a 2 hour, 100 mark exam. This gives students the experience they need to perform at their best in Year 11.

## Year 11

Year 10 focussed on delivering the knowledge and skills needed for students to work independently though their NEA coursework. As students’ progress through their coursework, it is clear why these skills and knowledge are so important to build into the projects from an early age.

Year 11 continues to focuses on the 50% coursework through until February half term of Year 11. Whilst this work is taking place, students simultaneously have exam preparation work. This is set through both online learning platforms as well as in class.

As the coursework advances to completion, teachers focus their students toward the terminal exam. A rigorous and intensive revision plan is put into place that is carefully calendared and ensures that learning is stimulating and challenging. Nearly all of this work is revision based, recapping and revisiting prior topics, building stronger pictures in students’ minds so that they can draw on it when needed in the real exam.

We use a variety of techniques from mind mapping to flash cards, games, quizzes, videos, online learning platforms and practice exam papers to help our students learn and retain the knowledge they need.

Lots of our Year 11 students go on to study linked courses at higher education or take on apprenticeships. It is therefore important that we help them transition from this course to the next step in their journey. We do this by giving them the wealth of experience they have whilst in our care and by linking with both local business and colleges.