# DESIGN TECHNOLOGY

## STAFF CONFIDENCE & CAPABILITY AUDIT

| Name | | Role in School | |
|---|---|---|---|

This audit is a self evaluation tool for the school to assess the confidence and capability of staff in teaching or supporting learning in Design Technology. It is an assessment of your knowledge and skills in delivering the Design Technology scheme of work and your knowledge and skills in this subject. Results of the audit will be used to prioritise training and development needs in Design Technology over the coming months.

**Section 1** **Confidence in teaching the key strands of learning in Design Technology**

| How confident are you about your knowledge and skills in the following strands of learning in Design Technology? | Not confident and capable | Limited confidence and capability | Confident and capable | Highly confident and capable |
|---|---|---|---|---|
| Cooking & Nutrition | | | | |
| Textiles & Sheet Materials | | | | |
| Structures | | | | |
| Mechanical Systems | | | | |
| Electrical Systems | | | | |
| Program Systems (Computer control & monitoring) | | | | |

**Section 2** **Key Themes and Ideas in Design Technology**

| How would you assess your knowledge and understanding of these key themes and ideas in Design Technology? | No knowledge or understanding | Limited knowledge or understanding | Broad knowledge or understanding | Extensive knowledge or understanding |
|---|---|---|---|---|
| The iterative process of designing, making and evaluating | | | | |
| Using a design brief and design specifications when creating a product | | | | |
| Helping children to generate ideas when starting a project | | | | |
| Using drawings as part of the design process | | | | |
| Using models and prototypes when designing and refining products | | | | |
| Ensuring that children work in a way that is healthy, hygienic and safe | | | | |
| Having a clear plan of action to aid the making process | | | | |
| Different techniques to join and combine a range of materials | | | | |
| Knowing which tools to use when using different materials | | | | |
| Evaluating a product to see whether it can be recycled, reused or repurposed | | | | |
| Using program (control & monitoring) systems in design technology | | | | |

| Section 3 | Technical Knowledge & Practical Knowledge in Design Technology |
|---|---|

| How confident and capable do you feel in teaching and/or supporting learners in developing the following techniques: | | Not confident and capable | Limited confidence and capability | Confident and capable | Highly confident and capable |
|---|---|---|---|---|---|
| Cooking & Nutrition | Cutting food ingredients using the bridge hold and claw grip | | | | |
| Cooking & Nutrition | Preparing ingredients by measuring, weighing, peeling, grating. | | | | |
| Cooking & Nutrition | Following and writing a cookery recipe | | | | |
| Cooking & Nutrition | Food hygiene and safety routines | | | | |
| Cooking & Nutrition | Following a recipe that involves controlling temperature (hob or oven) and timings | | | | |
| Cooking & Nutrition | What constitutes a healthy diet? (food groups / five a day) | | | | |
| Cooking & Nutrition | How and where different food comes from and the concept of seasonal food | | | | |
| Cooking & Nutrition | Evaluating food using a taste test | | | | |
| Cooking & Nutrition | How to make bread using yeast / the importance of micro-organisms in cooking | | | | |
| Textiles | Sewing techniques (running stitch, overstitch and backstitch) | | | | |
| Textiles | Different techniques & methods of joining textiles together | | | | |
| Textiles | Using templates and patterns to create textile shapes and 3D fabric products | | | | |
| Textiles | Techniques for decorating textiles | | | | |
| Materials | Using a range of tools to cut, shape and join different materials | | | | |
| Materials | How to accurately cut a range of materials, sometimes using a template as a guide | | | | |
| Materials | Different techniques & methods of joining materials together | | | | |
| Construction | Using cardboard engineering techniques to create structures | | | | |
| Construction | Creating wooden frame structures using the Jinks method | | | | |
| Construction | Techniques to make structures stronger, stiffer and more stable | | | | |
| Mechanical Systems | The different types of movement (rotary, oscillating, reciprocating and linear) | | | | |
| Mechanical Systems | Using levers and linkages as mechanisms to create movement | | | | |
| Mechanical Systems | Using wheels and axels to create movement | | | | |
| Mechanical Systems | Using pulley systems to create movement | | | | |
| Mechanical Systems | How gears can change the speed and direction of movement | | | | |
| Mechanical Systems | How cams work in changing the direction of movement | | | | |

## Section 3 Technical Knowledge & Practical Knowledge in Design Technology

| How confident and capable do you feel in teaching and/or supporting learners in developing the following techniques: | | Not confident and capable | Limited confidence and capability | Confident and capable | Highly confident and capable |
|---|---|---|---|---|---|
| Electrical Systems | Identifying the input and output in an electric/program system | | | | |
| Electrical Systems | Creating simple electrical circuits | | | | |
| Electrical Systems | Incorporating simple electrical circuits into a product | | | | |
| Program Systems | Including electronic components into a product | | | | |
| Program Systems | Using computer software to control and monitor products | | | | |
| Program Systems | Writing computer block code to monitor and control products | | | | |

## Section 4 Other areas of Design Technology

| How would you assess your confidence and capability in these areas of Design Technology? | Not confident and capable | Limited confidence and capability | Confident and capable | Highly confident and capable |
|---|---|---|---|---|
| Food safety and Hygiene | | | | |
| Creating and following risk assessment guidance | | | | |
| Safety procedures when using tools to cut, join and shape materials | | | | |
| Design using computer-aided design software | | | | |
| Design using complex drawing techniques (cross-sections, cut-aways and exploded diagrams) | | | | |
| Evaluating a product at the end of the project | | | | |

## Section 5 Professional development focus areas in Design Technology

This section gives you the opportunity to list areas for professional development (These can be from the answers above or other areas that you think are a priority in Design Technology)