

Knowledge is 'food for thought'

This design technology curriculum has been co-designed by primary senior leaders and subject leaders from primary and middle schools within the Trust and considered the rationale laid out by the DT Association.

Our Primary DT Curriculum purpose and aims:

Design and Technology in our schools develops children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages children's creativity and encourages them to think about important issues. Pupils will acquire and apply knowledge and understanding of materials and components, mechanisms and control systems, structures, existing products, quality and health and safety.

All projects are based on problem solving and responding to real life problems ensuring that they have meaning and purpose. The cycle of research to gain knowledge, design, make and evaluate is revisited each year and the planning is based around six key elements. It is underpinned by KASE - risk-tolerant, collaboration, communication, community (enterprise), self-directing and considers the world beyond school.

1. **Creativity and imagination** – the basis of the subject. We must encourage creativity and imagination in our curriculum and **NOT** striving for children to produce an identical product by the end of half term.
2. **Design and make products** – although the National Curriculum mentions the iterative design process (a cyclic process of prototyping, testing, analysing, and refining a product), it does not specify that the whole process should be followed at all times. We can consider teaching sequences where children design something without making it, or where they make something without having designed it first. The latter is a great way of introducing new skills to children; for example, following a recipe in a food technology session. Of course, other times we will want children to engage in the process of both designing and making something.
3. **Solve real and relevant problems within a variety of contexts** - If a unit of work is based around a problem that must be solved, instead of around an outcome pre-decided by the teacher, the potential variety of outcomes is limited only by the number of children in the class. A problem should be the driving force behind any D&T unit. The examples in the scheme of work are just that, examples, and should not be seen as being pre-determined, far better to overcome problems that the children determine giving opportunities for creativity and imagination. The knowledge and skills are what must be taught to achieve the end points.
4. **Considering their own and others' needs, wants and values** - This is an extension of the previous point. If children are presented with a problem to solve, it can be made personal by asking them how they think it should be solved. By allowing and encouraging them to think about how the problem could be solved to the benefit of themselves, and other people whom they know, there is the potential for greater engagement and motivation. All we must do is ask ourselves: what problems are real and relevant to children that are in my class?
5. **Develop the creative, technical and practical expertise needed to perform everyday tasks confidently** - There are so many ways of incorporating real-life skills into our D&T units because of this aim. If we keep in mind the words "real" and "relevant", then there are plenty of interesting and useful things that we can teach children to do.
6. **Critique, evaluate and test their ideas and products and the work of others** - If we follow the writing process of planning, drafting, sharing, evaluating, revising, editing and publishing, then children will already be used to following steps that lead to the improvement of a product. But this should also be done with ideas and products that aren't their own – there isn't always the need to have designed and made something first. Children could test how well an existing product, a tablet computer, for example, fits a particular brief – is it easy to use for someone with limited sight?

In summary

Give opportunities to engage in: Activities which involve investigating and evaluating existing products, focused tasks in which children develop particular aspects of knowledge and skills, designing and making activities in which children design and make 'something' for 'somebody' for 'some purpose'