Design and Technology Curriculum Rationale

At St Wilfrid's, children will learn Design and Technology as a distinct subject, with curriculum links made when it is suitable to do so. When D&T is taught as a distinct subject there are clear opportunities to develop and strengthen specific skills. Children will learn practical skills and resilience through effort in the iterative process of design, but will also be equipped with the knowledge to make products which "move, light up, are structurally sound, don't collapse and meet the requirements of health and safety;" "Good buildings..." (i.e. products)..."come from good people, and all problems are solved by design." (Gardiner.) Children will recognise their own success and contribution to a project. They will see themselves as having the potential to be good citizens of the world, enriching society through a positive contribution to their community and beyond, designing and making things for a particular purpose, with the aspiration to "make something that adds value to the real world." (D&T Professional Development Materials for Primary Schools.)

INTENT



The school follows the National Curriculum D & T Programme of Study. We use the Design and Technology Association 'Projects on a Page' (POAP) to teach D.T.

Alignment to National Curriculum



By the time pupils move on to secondary school, they will be able to generate responses to D.T. tasks and challenges which show practical skills and knowledge of requirements to make sound and stable products which are fit for purpose. They will be prepared to take risks and modify their work as part of the iterative process of D.T. work. They will be able to reflect on and evaluate critically their own and others' work, and show resilience when working within the design process.



Sequencing

Our D&T curriculum is a spiral curriculum. Through the use of the Design and Technology Association's 'Projects on a Page' vocabulary, skills and knowledge are revisited and built upon.



Addressing Social Disadvantage



Local Context

A key principle of our teaching is about belief that every child can engage with D&T. The resources used in school are suitable for pupils of all abilities. We have a firm belief that every child can achieve and that they are entitled to the same knowledge and cultural capital, whatever their background or starting point. Learning for those with low entry points is scaffolded to allow these to access and achieve.

The locality of Sheffield has a long and rich history of technological designers, craftspeople, makers and manufacturers which continues today, particularly related to steelmaking and other metalworking. All children will gain knowledge and experience of this through visits to our city's many industrial heritage sites and museums.

IMPLEMENTATION



Pedagogical Approaches

D&T lessons begin with a recall activity, the purpose of which is to revisit and apply previously taught knowledge and to recall skills appropriate to the task. The role of the teacher is to introduce key skills, techniques, materials and projects but to facilitate and allow pupils to take their own risks and experiment with ideas through the iterative design, test and review process.



Teachers' Expert Knowledge

The D&T Programme of Study and supplementing resources can be confidently delivered by specialist and non-specialist teachers alike. Subject specific professional development takes place as part of INSET training and Professional Development Meeting time.

Teachers will use assessment questions to ignite

skills, possible ideas for further improvement and

and techniques used.

opportunities for children to reflect on the materials

reflective discussion during each lesson. The questions

aim to promote dialogue about the success of the focus



Promoting Discussion and Understanding



Knowing More and Remembering More

The progression built into the D&T POAP includes core knowledge and skill development for each year group. Key D&T terminology and vocabulary is taught in context. Throughout each unit of work, teachers will revisit, embed and assess learning through careful questioning and quizzing on learning so far both in the unit and in previous years.



Assessment questions throughout lessons provide teachers with an indicator of pupil confidence. D&T books evidence progression of skills in all year groups.

IMPACT



Approach to Assessment

The approach to assessment is less formal than in core subject disciplines. In D&T, there is ongoing teacher assessment to ensure that the children are keeping up with the pace of the curriculum and achieving our goals. Success criteria for projects will be established and measured throughout the design process, the most prominent being the requirement to design a product which is fit for purpose and matches the brief.



Performance Data

There is no published data for D&T at primary school. The school tracks foundation subjects very broadly to ensure that pupils are working within the curriculum expectations for their year group.



Pupils' Work

D&T notebooks are key to capturing pupil work, e.g. design ideas, notes recording process and evaluations and annotated photographs. Additionally, pupil work is displayed in communal areas and classrooms, or shown through photographs.



The subject leader talks to pupils about their learning as part of the monitoring process. This is to see if core vocabulary has been remembered and understood. Pupils also will have the opportunity to talk about their work and their enjoyment and understanding of the lessons, showing much they can recall, and their responses will be used to inform teaching.

Links / References

The D&T Association: www.data.org.uk