

Wallace Fields Infant School & Nursery Subject Story for Design Technology (DT)



Intent:

At Wallace Fields Infant School & Nursery our vision for Design Technology (DT) is that all children have the opportunity, through 'hands on experience' to be creative and design in a varied way, with meaning. Our curriculum intends to inspire creativity, imagination, risk taking, innovation and a critical understanding of the impact of design technology on daily life and the wider world. Through DT, we encourage children to become independent, creative problem solvers and thinkers both as individuals and as part of a team. Our immersive curriculum provides opportunities for children to design, create and reflect on their DT work. Children design and make products that solve real and relevant problems considering their own and others' needs, wants and values whilst enabling them to use and apply skills from other curriculum subjects including mathematics, science, engineering, computing and art.

The National Curriculum for DT aims to ensure that all pupils:

- *develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world*
- *build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users*
- *critique, evaluate and test their ideas and products and the work of others*
- *understand and apply the principles of nutrition and learn how to cook*

Implementation:

- Teachers plan collaboratively using the DT progression grid when creating their medium term plan. DT is planned by the subject leader for the class teacher to use as a guide when planning on a termly basis, which is reviewed regularly. DT is taught half-termly, however some topics lend themselves more to different subject areas, and therefore the progression grids for DT are highlighted throughout the year to ensure that full coverage takes place each year.
- **In Key stage One** DT is taught during 'Task time', following a well-planned series of lessons. Taking into account, the opportunity to explore deconstruct, design, make, test and evaluate. This can vary between whole class 'teach' sessions or as a task time 'recall' activity. There is a clear task set out which is highlighted on the task time board alongside either "teach" or "recall". DT work is evidenced in learning journals, showing children's progress.
- **In Early Years**, DT is developed through continuous provision. DT is accessible in both our creative and construction areas within the classroom, where the children thrive by carrying out challenges set by the teacher. Depending on the children's engagement and learning, the teacher will either revisit the challenge or move the children's learning forward by setting a new challenge. We encourage the children to participate in the activities and encourage their determination to try a new challenge, however we also support and encourage the children to think individually and have their own idea's focussing on the process not the end product.

- Teachers and Assistants Teachers support the children with questioning, recall and key vocabulary in their DT learning throughout the school.

Progression across year groups:

- **In Early Years** DT is explored through the umbrella of 'Expressive Art and Design' and 'Understanding the world'. Children are encouraged to think creatively and use resources available in original ways. We encourage the children in Early Years to work with different contexts when designing. Staff support the children by using golden questions 'What do you think you will add next?' encouraging the children to think about their next steps. We also use our golden questions to ask the children to evaluate what they done, for example 'What part of your 'tower' do you really like?' or 'What could you have done to make your project stronger/faster/bigger?' This supports the children to evaluate their work using deeper thinking.
- **In Year 1**, teachers build further on the knowledge and skills gained in DT during Early Years. The children deconstruct, design, make and evaluate the project they are working on using key vocabulary and critical thinking about the topic. Children follow a design criteria to design their product. When making their product the children select the correct tools and equipment, explaining their choices. This allows children to think about the impact each tool is having. When evaluating we encourage the children to refer back to the initial project design and evaluate how well they have completed it.
- **In Year 2**, the children deconstruct, design, make and evaluate their work at a deeper level. When designing the children follow a design criteria and describe their design using pictures, diagrams, models, words and ICT. The children are encouraged during their making stage to think about the audience they are creating their project for and why it is suitable for them. Once the project is complete, the children move on to evaluation where they will reflect back on their design criteria to evaluate and critique their own work and the work of their peers. Children also discuss and learn about where resources come from.

Impact:

- ✓ Children have a greater understanding of the process required when designing and are able to talk through each stage with increased confidence as they move through the EYFS to the end of KS1.
- ✓ Children are reflective learners and use evaluative skills to review their DT work.
- ✓ Children confidently communicate their ideas in a variety of ways, for example, by talking, drawing or through IT.
- ✓ We will be able to see that the children know more and remember in more in DT, through evidence in their learning journals, high quality DT work displayed around the school and pupil voice. We will also see they are able to recall prior learning and apply it. Children will then start their next year of learning with the necessary skills and knowledge to build upon.

If you were to walk into a DT lesson at WFIS & Nursery you would see:

- ✓ *The children creating and thinking critically to make, build and evaluate their work*
- ✓ *Children who are keen to learn and have a passion for constructing, building and creating*
- ✓ *Class teachers and Assistant teachers questioning the children to think at a deeper level, embedding construction and problem solving skills.*
- ✓ *Children who are proud of what they have created and confident to talk about the different aspects of their work.*

British Values and Spiritual, Moral, Social and Cultural Learning in Design Technology (DT):

British Values: Through the DT taught at WFIS, the children are provided with rich opportunities to demonstrate their British Values. Collaboration within the classroom encourages children to show mutual respect to others by listening to their ideas and working together to achieve an end goal. Children are also respectful and show tolerance when exploring designs from other cultures and sharing their thoughts. During task time, children work democratically to design and create together, showing a mutual respect for the resources and tools we have. They also ensure rules are followed, to keep everyone safe when working with equipment.

Spiritual: In DT, spiritual learning and development is shown by the way the children can express themselves, through the use of colours, materials and resources. Children value and respond to others ideas and share ideas of their own. Teachers support spiritual learning by encourage children to think creatively and develop self-confidence in their work.

Moral: Through DT, children are taught to understand and value where our resources come from and the work that goes into things before it reaches us. For example, a recent topic of Farm to Fork, the children explored where the food came from before it reached us to cook and eat. We encourage the children to think about the world around them and to make the best choices to look after the planet.

Social: Children develop socially in DT through working in a variety of ways, e.g. groups or pairs. Children show respect and attention when sharing ideas and opinions with one another. We value each other's different ideas, which makes our learning environment friendly, successful and fun!

Cultural: As a school we encourage children to share and celebrate diversity. Through DT we provide children with opportunities to understand and learn about cultural influences on resources, respecting and valuing each other's cultural diversity.

Pupil Voice:

Nursery: "I'm making a robot"

Reception: "I like making big houses with paper and boxes"

Year 1: "We used junk modelling to make a model; I used cello tape because it's stickier"

Year 2: "In DT we made soup, we had to cut up the vegetables and Mrs Nicholson and Miss Male cooked it. We got to taste it. We used so many different vegetables, it was yummy and tasted healthy!"

Outstanding Learning Outcomes:



KS1 den making in the school playground



A Nursery child working on their scissor skills



Sea creature project using recycled materials from home. Year 2.

Successes in 2022-2023:

- ☺ **DT based after school clubs.** DT based after schools clubs have been incredibly popular. The children enjoyed attending Cookery club and Lego club where they build on their knowledge and understand of DT.
- ☺ **Clearly sequenced curriculum** – DT lessons are carefully planned to build upon children's previous learning therefore children are able to know, remember more and do more.

Priorities for 2022-23:

- ⇒ **More DT work to be displayed in learning journals:** Ensure there is evidence of the children's outstanding work in their journals to showcase their amazing projects.
- ⇒ **Ensure that DT is being assessed effectively:** We want to ensure that children are continuing to make good progress. This means assessing the children effectively to ensure they make sufficient progress.
- ⇒ **Ensure children are able to effectively use vocabulary taught in subject specific sessions:** We want to ensure that the subject specific vocab is fully embedded so children are able to use it when talking about their creations.