



Individually Strong, Collectively Stronger

Design and Technology Policy



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DESIGN AND TECHNOLOGY

AIMS AND OBJECTIVES

At Allen Edwards we value the importance that Design and Technology plays in preparing children for a wider understanding of the world around them. Children learn to evaluate and creatively improve the quality of life. The subject is essentially about problem solving, and it allows children to work both individually and as part of a team. In Design and Technology, they combine practical skills with an understanding of aesthetic, social and environmental issues. The process of planning, making, reviewing and changing is a wheel of learning that can be applied to all curriculum areas.

Aims and objectives are:

- To develop imaginative thinking in children and enable them to talk about their likes and dislikes when designing and making.
- To use this imaginative thinking in the context of a set design criteria and understand their design choices.
- To explore attitudes towards the made world and how we live and work within it.
- To develop an understanding of technological processes, basic mechanisms, products and their manufacture, and their contribution to society.
- To foster enjoyment through the development of their own skills based upon which they can draw in all design and making activities.

TEACHING AND LEARNING STYLE

The school uses a variety of teaching and learning styles in Design and Technology lessons. We aim towards a percentage of 40% design and 60% making in the units taught. This means the breadth of study described in the National Curriculum Programme of study is covered by:

- Investigating and evaluating a range of familiar products.
- Focused practical tasks that develop a range of skills, techniques, processes and knowledge.
- Design and make assignments using a range of materials, including food when possible, resistant materials that can be used to construct products, and textiles.
- Teachers ensure the children apply their knowledge and understanding when developing, planning, making and evaluating products.
- We do this through a mixture of whole class, group and individual activities.
- Within lessons we give children the opportunity to collaborate and listen to others' ideas in order to respect others' points of view.
- Children have access to a wide range of resources, including ICT and cross-curricular links.
- We differentiate the D.T. curriculum so that all children can access it. We do this through a range of strategies.
- Setting common tasks that are different through outcome.
- Setting tasks of increasing difficulty where not all children complete tasks.
- Grouping children by similar abilities or by those which will complement each other, and setting different task for each group.
- Providing a range of challenges through different materials/resources.
- Using additional adults to support individuals or groups.



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All teachers must teach 3 Design Technology units a year. Due to the new initiative to link all learning to a chosen theme that is planned in for each term and to therefore make even closer cross curricular links with literacy, science and theme work, as well as all the other subjects in the curriculum, it has been decided that teachers can invent their own units of work in Design Technology. This is, as long as they can clearly prove that they are teaching the necessary skills required to be taught by a specific D.T. unit. It is believed that this opportunity for greater creative freedom will result in more exciting Design Technology work throughout the different key stages and better inform the learning in all the other subject areas. The order that the units of study are to be taught in, is to be agreed on by senior management and the year group teachers involved. Every effort is to be made to ensure that the units of work support the learning in all the other curriculum areas being taught.

TEACHING DT TO CHILDREN WITH SPECIAL NEEDS

1. We teach DT to all children, whatever their ability. Through our teaching in this subject we provide learning opportunities that enable all children to make progress. Assessment against the National Curriculum attainment levels allows us to consider each child's activities.
2. When progress falls significantly outside the expected range the child may have special needs. Our assessment process considers a range of factors which may be affecting the child's learning so that we can match our teaching more effectively to the child's needs. We then follow the school policy for SEN if necessary with an IEP for DT.
3. We believe in equal opportunities for all our pupils, and so ensure that they have access to the full range of activities available in DT. Whenever possible we link activities to the local environment so their learning has greater meaning and relevance to their experiences of the world.

PLANNING

1. Allen Edwards uses the National Scheme as the basis for its curriculum planning in D.T. However, planning is now even more closely linked to the particular theme that is being studied by a year group in any given term. Therefore, all work will be of a strongly cross curricular nature. Where possible we use the local environment as starting point for aspects of our work. Planning for Foundation subjects is now linked to 'Themes' for each half term, so that one DT project will be planned for each term.
2. Long term planning comes in the form of the curriculum yearly maps and illustrates all of the cross curricular links. Skills and media are plotted throughout the year to show coverage and progression.
3. Medium term plans are to be written in an adequate amount of detail and can take ideas from the QCA units. However, teachers will also work on developing these plans so that they strongly link in with the main theme that is being taught that term. This will ensure that the cross curricular links are sufficiently enhanced.
4. Short term planning will be in response to how the children are learning as sometimes skills and techniques need reinforcing before moving forward. Session plans which involve potentially dangerous equipment, or involve an outing will have a risk assessment and necessary strategies specified for Health and Safety.



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5. Planning is to be checked by the subject co-ordinator at the beginning of each term. It must be available and on the computer system no later than the Friday of the first week. In addition, written feedback on planning is to be given every 2 terms. If there are any discrepancies evident in the planning a re-visit will be organised a week later by the subject leader to make sure that any problems have been rectified.

ASSESSMENT AND RECORDING

All teachers use the same class portfolio that they use for the classes Art and Design work. This will display the children's work for each unit taught. Formative assessments about the children's work will be able to be made through observation, and collecting samples of work from each unit. The progression of skills and experience taught each class can therefore be tracked by looking at all the class portfolio which have the children's work recorded in them. As the majority of the work produced will be 3D, photographs will also be used to show the breadth of work covered.

Each class portfolio must include:

- The yearly curriculum map overview.
- A heading and some brief blurb on the unit being taught.
- 3 examples of children's work or photos of work – 1 top, 1 middle and 1 lower.
- 3 children's evaluations of the unit - 1 top, 1 middle and 1 lower. (Could be the same children whose work is already included.)
- The unit assessment showing where each child's learning is at, including the teacher's comment on what particular skills the child has learnt and the nature of their progress in more detail.
- Photos of any displays with some brief blurb about it.
- If appropriate a note of materials/skills covered and organised visits included.

At the end of each unit, teachers assess each child on their abilities in line with the QCA descriptors that outline the extent of a child's learning at 3 distinct levels of attainment. These assessments are also in line with the Learning Intentions for that project. Teachers can then use this to make annual assessments on the Reports system we use for their parents.

Children are encouraged to use sketchbooks throughout Key Stage 2 which also shows development of skills and progression of ideas and abilities. These are used as a place to record work and keep photographic evidence. At least one visual record of work covered during a unit must be included in each child's sketchbook. Where possible this would ideally be the final piece completed at the end of a unit but this may not always be possible. Along side of this, the unit assessment should be included with the teacher's comment on as mentioned above. In addition, teachers make assessments about the children's work by observing them during lessons. They mentally note developments and include written notes when annotating their plans, often recording key points illustrating the progress of pupils against the learning objective for that lesson.



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MONITORING

The monitoring of the standards of children's work and of planning and teaching in DT is the responsibility of the subject leader. The work of the subject leader also involves supporting colleagues in their teaching, being informed about curriculum developments in the subject, and providing a strategic lead for the direction of the subject in the school. The subject leader has designated management time to order to review evidence of the children's work and undertake lesson observations of Design and Technology teaching across the school.

CROSS-CURRICULAR LINKS

Cross-Curricular planning is now part of the schools Foundation subjects scheme of work. The nature of DT makes it obviously linked to Science through materials and processes, mechanisms and basic physics, and the need for close observations, hypothesising and reviewing experiments. Maths is also a vital link through the understanding of shape and measure. The vocabulary developed in DT activities supports language and literacy work. There is opportunity for all these subjects to be accessed and enhanced through design and make activities. The other foundation subjects such as History and Geography lend themselves to topic work that involves DT and Art activities. The creativity fostered in DT will enrich all subjects.

RESOURCES

1. Our school has a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources, with more specialised equipment kept centrally in the DT cupboard and the Art resource room. Teachers are responsible for the return of tools and equipment borrowed from the store cupboard.
2. Teachers can request classroom top-ups termly from the DT subject leader to replace consumable or damaged equipment and materials.
3. Resources must be stored and labelled clearly in the classroom and children aware of what they are to access and what the teacher is to access.

HEALTH AND SAFETY

1. All children must be taught how to safely use equipment they have access to. Teachers must be aware of the risk factors involved when using equipment. For guidelines see the booklet published by D.A.T.A. with the teaching resources in the staffroom.
2. When teaching a food technology unit there must be dedicated equipment used only, this is kept in the kitchen. Children must be taught about food safety and hygiene.
3. When doing woodwork that involves cutting, or other cutting of hard materials, safety glasses must be worn.

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Headteacher Signature: Louise Robertson