



## **INSPIRE MULTI ACADEMY TRUST DESIGN AND TECHNOLOGY POLICY**

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### ***SIGNATURES:***

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# INSPIRE MULTI ACADEMY TRUST

## Design and Technology Policy

### 1 Aims and objectives

1.1 Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators. This should be done through offering each child a range of opportunities to develop their design and technology capability irrespective of age, gender, belief or ability.

1.2 The aims of design and technology are:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

### 2 Teaching and learning style

2.1 At Inspire Multi Academy Trust we use a variety of learning styles. Our principal aim is to develop children's knowledge, skills, and understanding. Sometimes we do this through whole-class teaching, while at other times we engage the children in an enquiry-based research activity. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

2.2 We recognise that there are children of widely different scientific abilities in all classes and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways by:

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- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (we do not expect all children to complete all tasks);
- grouping children by ability and setting different tasks for each ability group;
- providing resources of different complexity, matched to the ability of the child;
- in some classes, classroom assistants to support the work of individual children or groups of children .

### **3 Design and technology curriculum planning**

**3.1** Our trust has a creative approach to the curriculum as the basis for its planning. We have the National Strategy and our Progression in skills Document. The topics children study build upon prior learning. While there is flexibility in the topics studied, there are opportunities for children of all abilities to develop their skills and knowledge, the planned progression built into the objectives means that the children are increasingly challenged as they move through the trust.

**3.2** We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage. The design and technology subject leader works this out in conjunction with teaching colleagues in each year group.

**3.3** Our medium-term plans, which we have adopted from the national scheme, give details of each unit of work for each term. The Design and Technology subject leader is responsible for keeping and reviewing these plans. In this way we ensure complete coverage of the National Curriculum but do not have to repeat topics.

**3.4** The class teacher is responsible for completing the daily lesson plans for each lesson (short-term plans). These plans list the specific learning objectives of each lesson. The class teacher keeps these individual plans, and s/he and the Design and Technology subject leader often discuss them on an informal basis.

### **4 The Foundation Stage**

**4.1** We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the trust's work. As the reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals and formulated through Foundations In Learning. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

- 4.2** We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

## **5 Contribution of design and technology to teaching in other curriculum areas**

### **5.1 Literacy**

Design and technology contributes to the teaching of Literacy in our trust by providing valuable opportunities to reinforce what the children have been doing during their Literacy lessons. Discussion, drama and role-play are important ways that we now employ for the children to develop an understanding that people have different views about design and technology. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas. (see Bringing Literacy to Life with Design and Technology from Curriculum 2000).

### **5.2 Information and communication technology (ICT)**

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas and make repeating patterns. They use databases to provide a range of information sources and CD-ROMs to gain access to images of people and environments. The children also use ICT to collect information and to present their designs through draw-and-paint programs.

### **5.3 Personal, social and health education (PSHE) and citizenship**

Design and technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

### **5.4 Spiritual, moral, social and cultural development**

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

## **6 Teaching design and technology to children with special needs**

- 6.1** We teach design and technology to all children, whatever their ability. Design and technology also forms part of our trust curriculum policy to provide a broad and balanced education to all children. Teachers provide learning opportunities that are matched to the needs of children with learning difficulties. Work in design and technology takes into account the targets set for individual children in their Individual Education Plans (IEPs).

## **7 Assessment and recording**

- 7.1** Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit of work, teachers make a judgement against the National Curriculum levels of attainment. Teachers then use the levels that they record to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents. Each teacher passes this information on to the next teacher at the end of each year.

## **8 Resources**

- 8.1** Our trust has a wide range of resources to support the teaching of design and technology across the trust. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. This room is accessible to children only under adult supervision.

## **9 Health and safety**

- 9.1** The general teaching requirement for health and safety applies in this subject. (Appendix 1)
- 9.2** We teach children how to follow proper procedures for food safety and hygiene.

## **10 Monitoring and review**

- 10.1** The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the trust. The Action Plan for Design and Technology outlines developments in the monitoring and reviewing of Design and Technology.

**Signed:**

**Date:**