



# **DESIGN & TECHNOLOGY POLICY**

## The Beacon

## Design and Technology Policy

### Rationale

At The Beacon, Design and Technology is essentially a practical activity, concerned with developing children's abilities to operate perceptively, creatively, effectively and confidently. Through designing and making children tackle a wide variety of issues, drawing upon a broad base of knowledge, skills and values. Design and Technology at Highview recognises the importance of 'knowing how' as well as 'knowing that'.

### Aims

1. To developed capability in the skills, process, knowledge and understanding involved in designing and making.
2. To develop a critical awareness about created things in the world and the recognition that pupils can bring about changes for the good.
3. To develop a sense of enjoyment and pride in pupils and their skills.
4. To develop a range of skills related to decision making and activity management.

### Objectives

#### **1. To developed capability in the skills, process, knowledge and understanding involved in designing and making.**

- To provide opportunities for pupils to combine designing and making skills with knowledge and understanding in order to design and make products.
- To understand the process of designing and making something.
- To develop a range of practical skills and abilities
- To develop knowledge and understanding to aid design and making.

#### **2. To develop a critical awareness about created things in the world and the recognition that pupils can bring about changes for the good.**

- To help pupils look at thing around them and see how they are made and why they are made as they are.
- To provide opportunities to investigate objects, take them apart and assess them to understand how they are made and how they work.
- To understand how designers try and meet people's needs and values.

### **3. To develop a sense of enjoyment and pride in pupils and their skills.**

- To differentiate for all levels, to allow successful outcomes for all abilities
- To celebrate the ability that goes into making things, their own and their peers.
- To display and celebrate the work produced at every level.

### **4. To develop a range of skills related to decision making and activity management.**

- To encourage pupil's ability to work increasingly independently as well as co-operate in small groups.
- To help pupils develop the ability to work within given boundaries; eg time, materials, space, equipment, ability, health and safety.

## **Principles of Teaching and Learning.**

### **1. Differentiation and Additional Educational Needs.**

Pupils at The Beacon all have a Statement of Special Educational Needs. This means that all pupils have a differing range of complex needs that need to be considered within any activity. These needs range from delayed cognitive development, autistic spectrum disorder, speech and language difficulties, challenging behaviour and a range of attention, concentration, co-ordination and manipulative needs. Classroom management, teaching strategies, practical tasks and assessments have to be organised to take account of these differing needs in lessons. DT will engage pupils in a broad range of differentiated activities in a variety of methods of communication, speaking, drawing, writing, designing, making and using ICT.

### **2. Breadth and Balance**

Units of work will be selected and planned to ensure a balance of materials, skills, knowledge and understanding through each Key Stage to cover the statutory programmes of study.

Units of work will be planned to include appropriate, differentiated designing and making activities as well as practical tasks and work involving existing products.

### **3. Variety.**

DT requires pupils to:

- become capable of thinking, choosing and acting independently,
- make maximum use of the skills they have,
- learn new skills and develop and broaden their awareness.

To enable this range of teaching strategies will be used including

- Developing skills and knowledge of tools/equipment and materials.
- Explore and develop own ideas and ideas of others
- Work individually with support as necessary and within a small group
- Learn to apply the skills and knowledge to practical situations.
- Make qualitative judgements about their own, and other pupil's work in a constructive and supportive manner.
- Think constructively about their work

A wide selection of resources will be used to develop pupil's understanding about design and technology, including the environment, books, pictures, plans, photographs, people, construction kits, and ICT.

### **4. Organisation.**

In the Primary Department Design and Technology is taught by the Class Teacher to his/her class within the new Creative Curriculum.

In the Secondary Department KS3 are taught by Subject Specialists and each year group has three periods once a week (135 minutes). Twenty weeks is spent on Resistant Materials and 20 weeks is spent on Home Technology in KS 3. The Modules areas have been changed to Resistant Materials and Food Technology with Textiles being taught within the Art Programmes of Study. This allows greater time to be devoted to RM and Food Tech modules as they are now allocated one and a half terms each in KS3 allowing for greater practical skills to be explored.

### **5. Teaching Programmes**

Primary are following the new Creative Curriculum where DT is embedded within the topics as prescribed. Focus topics are suggested for each year group in order to aid progression of skills and limit overlaps and these are listed in the Primary overview. Schemes of Work for each year group are held by the class teacher.

The Subject Leader for the Secondary DT Programme has undertaken a review of the teaching programme for KS3 and KS4 and initiated a new programme for the new KS5.

RM Ks3:- a variety of projects (that incorporate some existing and some new) are in the SoW designed to meet the requirements for Ks3 and also there are new projects that involve shaping and making items with acrylics

RM Ks4:- are working towards the AQA entry level cert and these too have new projects involving acrylics to give a much wider base of experience in different materials

RM Ks5:- are completing various craft activities within the DT area under the guidance of a specialist teacher, the purpose being to make saleable items as part of the Enterprise Group in the 6<sup>th</sup> form in order to understand marketing, profit and loss plus the process of manufacturing things to be sold in the market place. Another benefit is that they will build on their experience from DT in the lower school and gain extra practical skills in order to increase their life skills generally.

In Home Technology KS3 pupils will now continue with three of the six terms per year for three years. The other three terms devoted to RM. This may allow a trial of potential City and Guilds Entry Level 1 with some of the Year 9 in September differentiated with AQA unit awards for those unable to access the C & G. Resistant Materials follows the QCA recommendations, differentiated, as specified by the Design and Technology Association scheme. Room space has been resolved with the building of a specialised DT room allowing new topic areas to be considered covering, electronics, plastics and systems and control.

In KS 4 Design and Technology is not taught as a subject within the National Curriculum but using the provisions of the Education Act 2000 - allowing pupils to 'develop their particular strengths' has provision for an option of Resistant Materials at this level. Other elements of DT are also taught within the Arts Award for KS4.

Home Technology continues to be taught separately for KS4 as outlined separately in the Home Technology Policy.

## **6. Relevance**

It is important for the pupils at The Beacon that the work they do in Design and Technology has some relevance to them. Wherever possible it is important that they have some first hand knowledge of some aspects of designing and making and that they can identify with it in concrete experience.

Pupils who engage in Design and Technology at The Beacon are being helped to prepare for living and working in a technological world. Pupils are stimulated both intellectually and creatively, whilst developing their personal qualities needed to complete a design project from initial ideas to a finished product.

Within the School Calendar there are links with the Schools Activities such as the 'Healthy Schools Initiative', Let's Get Cooking, Smoothie Bikes, Eco friendly days, Science week' Creative Arts , Geography and TASC days.

### **7. Cross Curricular Links and Skills**

Design and Technology draws upon and develops skills, knowledge and understanding from across the curriculum. Appropriate links can be made with other curriculum areas. It has strong links with particularly ICT, literacy and numeracy, arts, PSHE and citizenship and careers education.

### **8. Equal Opportunities/ Every Child Matters.**

All activities will be taught to challenge, stimulate and address the needs of every child. Both boys and girls will be given equal opportunities to access programmes activities and resources. In specific circumstances special aids will enhance the access of particular groups of children to the curriculum.

Learning Support Assistants will facilitate the access of children as groups and individuals to teaching and activities. Teaching styles content and class organisation and management will be adjusted to meet the high level special needs of pupils.

### **9. Health, Safety and Hygiene**

Pupils at The Beacon are taught a range of skills as part of their development spanning a number of curriculum areas. It is important that they are taught to adopt skills to enable them to work safely and confidently in a given environment and with specific tools and materials. Health and Safety issues must be considered carefully in terms of level of supervision and awareness in practical activities. Potential hazards with equipment include ovens, sharp knives, cutters, saws, hammers, drills, chisels, planes and glue guns. Pupils of all ages and abilities must be encouraged to consider and learn the health and safety rules in potentially hazardous situations and with equipment that needs special care with its use.

The Design and Technology Subject Leader will support teachers, head teacher and Governors in undertaking risk assessment of particular activities and recommend appropriate training as necessary.

### **10. Assessment Recording and Reporting.**

Pupil's progress within each Design and Technology Module is assessed and noted as an integral part of the teaching programme. Lesson plans for DT contain opportunities for teachers to note the progress of individual pupils through each lesson. At the end of each term, staff complete assessments on the B squared programme. This assessment gives an account of progress

made by the pupil over the term, showing specific skills, learning and knowledge achieved. At the end of the Academic Year, the Subject Leader collates the information on the progress of each pupil individually and collectively as a class, and records individual and average progress. In addition each pupil has a portfolio of work, often with photographs to show progress and achievement. Pupil's progress in DT is reported annually by the Subject Leader and forms part of the Annual Review Meeting with parents led by the Form Tutor. This shows the pupil's current NC level with information on targets achieved and new targets that are set.

## **11. Role of the Subject Leader**

The Subject Leader for Design and Technology is Mrs Ingrid Kendall who is responsible for KS3, 4 and 5 programmes. Individual Primary Teachers are responsible for fulfilling the DT programme in the Creative Curriculum.

The Subject Leader is responsible for the administration of the Subject budget, and Primary teachers apply for resources as required and as budget allows. The Subject Leader is responsible for the overview of ordering all materials - Primary resources are held mostly in primary classes, secondary resources are held in the new RM building.

## **12. Review**

The progress of the pupils is reviewed annually and considered in respect to the whole school improvement plan. The Subject Leader usually reviews the programme annually in the summer term providing feedback to the staff and Head teacher as required. Members of the Governing Body have a responsibility to observe the teaching of their nominated subject and to discuss any issues of concern or development matters with the Subject Coordinator.

The Head teacher and Management Team also review DT teaching as part of the cycle of Staff Performance Management.

This Policy is kept under review and updated as required.

Dec 2014

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## UPDATE SCHEDULE

| <b>Version</b> | <b>Reviewed</b> | <b>Reason for Update</b>  | <b>Next review date</b> | <b>Governor agreement</b> |
|----------------|-----------------|---------------------------|-------------------------|---------------------------|
| 1              | Sept 2016       | Transfer to single school | Sept 2018               | N/A                       |
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