Curriculum Statement: Design and Technology

Approved by Governors: 23rd May 2017

Signed

[Signature]

Mr T Barr, Chair of Governors

For review: September 2018

Website updated: ✓

The School is committed to safeguarding and promoting the welfare of children and expects all staff and volunteers to share this commitment.
Baldwins Gate CE (VC) Primary School

Design and Technology Curriculum Statement

Purpose of study
At Baldwins Gate Primary school we work to the new curriculum guidance 2014 to teach Design and Technology as a creative, practical subject which encourages all pupils to develop their imaginations and independence (See Baldwins Gate Primary School learning statement.) Pupils in Early Years are given the freedom to make and explore using and abundance of ever changing materials in the stimulating creation station, an area of the classroom designed to inspire inventiveness. In key stages 1 and 2 children are challenged to design and make products which solve real problems, considering the needs of themselves and others. Design and Technology is often used in conjunction with other subjects drawing on disciplines such as mathematics, science, engineering, computing and art to develop more meaningful learning experiences.

Special Educational Needs
Every child has entitlement to a broad, balanced, meaningful and relevant curriculum. It is recognised that every child is unique in terms of characteristics, interests, abilities, motivation and learning needs. At Baldwins Gate we recognise pupils’ different learning styles and preferences and aim to provide learning contexts for visual, auditory and kinaesthetic learners. Those children with exceptional learning needs have equal access to high quality and appropriate provision. We want pupils with identified special educational needs to have full access to all subjects of the School curriculum with teachers planning lessons that have no barriers to pupils achieving and with appropriate targets relating to the subject. All staff are aware of the needs of the children with Dyslexia and other specific learning difficulties. These children have full access to the curriculum and all classrooms are dyslexia friendly environments in which maximum learning takes place.

Design & Technology & Building Learning Power (BLP)
Design and Technology is an exciting practical area of learning which challenges all pupils. The subject engages both visual, auditory and kinaesthetic learners by challenging them to invent, listen, negotiate, plan and develop their own ideas both independently and as part of wider groups. The children learn how to take risks, becoming creative, resourceful, and innovative, citizens capable of expressing their ideas and sharing their thoughts with others.

Foundation Stage-D&T
The different aspects of design and technology skills are encompassed within the EYFS strand ‘Expressive Arts and Design’, however elements can also be found in all foundation stage curriculum areas of learning. The foundation stage lends itself to
an integrated approach to learning where design and technology can be seen across
the curriculum. There is an emphasis on independence and self-initiated learning,
which enables foundation stage children to freely explore resources and pursue their
own creative interests and talents in addition to the planned learning experiences.

Assessment and Curriculum Planning
Here at Baldwins Gate Primary School we believe children should be taught to
evaluate their past and present design and technology work, using this as a platform
from which to develop their creativity and skill. In Early Years, children are assessed
against the EYFS age related criteria within the strand of Expressive Arts and Design,
though aspects of creativity and inventiveness can be seen in all areas of the
creative curriculum. As a school we use the National Curriculum alongside the
Quigley assessment model to monitor individual pupil progress against the key stage
expectations. The system assesses pupil progress against age appropriate
descriptors, this enables teachers to monitor which pupils are working towards their
age related expectations and who may be exceeding these goals. This information is
then used to inform curriculum planning outlining how additional support or
challenge can be provided in order to meet the needs of our pupils. This information
is also used by teachers when reporting to parents.

Aims
The Curriculum (2014) for Design and Technology 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.

Attainment targets
By the end of each key stage, pupils are expected to know, apply and understand the
matters, skills and processes specified in the relevant programme of study.

Curriculum Requirements (2014)
Key stage 1
Through a variety of creative and practical activities, pupils should be taught the
knowledge, understanding and skills needed to engage in an iterative process of
designing and making. They should work in a range of relevant contexts [for
example, the home and school, gardens and playgrounds, the local community,
industry and the wider environment].
When designing and making, KS1 pupils should be taught to:

**Design**
- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

**Make**
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

**Evaluate**
- Explore and evaluate a range of existing products.
- Evaluate their ideas and products against design criteria.

**Technical knowledge**
- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

**Curriculum Requirements (2014)**

**Key Stage 2**
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].
When designing and making, pupils should be taught to:

**Design**
- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

**Make**
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.
**Evaluate**
- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.

**Technical knowledge**
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
- Apply their understanding of computing to program, monitor and control their products.

**Cooking and Nutrition**
As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. In the Early years department the team inspire children to make healthy choices as they are encouraged to select and even grow their own snacks. Children are taught about personal and food hygiene promoting healthy choices from the very beginning of each child’s learning journey.

**Key Stage One Pupils should be taught to:**
- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

**Key Stage Two Pupils should be taught to:**
- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

**Additional Opportunities - Cookery Club**
Additional opportunities are available as our school cookery club runs throughout the year and opens opportunities to explore food and cookery across both key stages.

*Design & Technology Coordinator- Mrs J Robertson*
*Reviewed February 2017*
# Design and Technology Curriculum YA

<table>
<thead>
<tr>
<th>Autumn Year A</th>
<th>Spring Year A</th>
<th>Summer Year A</th>
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<tbody>
<tr>
<td><strong>EY</strong></td>
<td><strong>EY</strong></td>
<td><strong>EY</strong></td>
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<tr>
<td>Our Homes and Communities</td>
<td>Construction</td>
<td>Messy Play</td>
</tr>
<tr>
<td><strong>Y1 &amp; 2</strong></td>
<td><strong>Y1 &amp; 2</strong></td>
<td><strong>Y1 &amp; 2</strong></td>
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<tr>
<td>Healthy Eating</td>
<td>Puppets</td>
<td>Using Textiles</td>
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<tr>
<td>Make a fruit Salad</td>
<td>(Link to toy topic)</td>
<td>(Link to materials topic-Science)</td>
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<tr>
<td>Cookery Club</td>
<td>Cookery Club</td>
<td>Cookery Club</td>
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<tr>
<td><strong>Y 3 &amp; 4</strong></td>
<td><strong>Y3 &amp; 4</strong></td>
<td><strong>Y 3 &amp; 4</strong></td>
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<tr>
<td>Junk Modelling</td>
<td>Construction of Viking ships.</td>
<td>Construction</td>
</tr>
<tr>
<td>Robot Study</td>
<td>Printing</td>
<td>Cookery</td>
</tr>
<tr>
<td>Weaving</td>
<td>Moving Parts &amp; card making</td>
<td>Cookery Club</td>
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<td>Cookery Club</td>
<td>Cookery Club</td>
<td>Cookery Club</td>
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<tr>
<td><strong>Y 5 &amp; 6</strong></td>
<td><strong>Y 5 &amp; 6</strong></td>
<td><strong>Y 5 &amp; 6</strong></td>
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<tr>
<td>3D Egyptian frames and boats - materials linked to science topic</td>
<td>Construction Fair ground rides, sewing, cookery</td>
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<tr>
<td>Cookery Club</td>
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### Design and Technology Curriculum YB -

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<tr>
<th>Autumn Year B</th>
<th>Spring Year B</th>
<th>Summer Year B</th>
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<tr>
<td><strong>EY</strong></td>
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<tr>
<td>Ours Homes and Communities</td>
<td>Construction</td>
<td>Messy Play</td>
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<td><strong>Y1 &amp; 2</strong></td>
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<td><strong>Y1 &amp; 2</strong></td>
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<tr>
<td>Investigating Materials</td>
<td>Moving Pictures</td>
<td>Musical Instruments</td>
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<tr>
<td>Make a shelter</td>
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<td>Cookery Club</td>
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<tr>
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<tr>
<td>Textiles &amp; Sewing</td>
<td>Large Art Sculptures</td>
<td>Construction</td>
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<td></td>
<td>Clay Modelling- Diva Lamps-Diwali</td>
<td>Cookery</td>
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<td>Cookery Club</td>
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<tr>
<td><strong>Y 5 &amp; 6</strong></td>
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<td><strong>Y 5 &amp; 6</strong></td>
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<tr>
<td>Bridges</td>
<td>Vehicles</td>
<td>Skill based lever project</td>
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<tr>
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