'Caring, Curious and Confident'

Curry Rivel Church of England Primary School

Curriculum Overview: Design Technology

Our curriculum approach to Design Technology reflects our vision 'Caring, Curious and Confident'. In particular, we aim for pupils to develop curiosity in Design Technology as well as providing opportunities to work co-operatively with others and become confident and resourceful learners.

Intent

We recognise that Design Technology is unique and includes its own substantive knowledge, disciplinary knowledge and skills. We are a six-class school and nursery, with mixed age classes. Due to demographic changes and unpredictable in-year admission numbers, our class structure is not guaranteed to be the same year after year. Therefore, we have sequenced the content of Design Technology using a two year 'rolling programme' for each class which ensures that whatever path a pupil takes through the school, the National Curriculum content is covered. More importantly, our curriculum is a 'spiral curriculum' in which key concepts are presented repeatedly throughout the curriculum, but with deepening layers of complexity. These concepts are:

- **Designing**
- **Making**
- **Evaluating**
- **Improving**

'Substantive' knowledge' is carefully 'curated' and we use 'Knowledge Organisers' to present this core knowledge. **Skills** are progressive through the use of the Design Technology **Skills Progression Overview**. We are also deepening our understanding of **disciplinary knowledge** for each subject so that concepts connected to a unit of work are revisited across the age ranges. By revisiting the concepts rather than the topics, we are able to embed knowledge and create connections with prior understanding, therefore making the learning 'sticky'.

In Design Technology, knowledge and skills are taught through **'strands'** which are repeated for each pupil's journey through the school:

1. **Cooking and nutrition**
2. **Mechanical systems**
3. **Textiles**
4. **Electrical systems**
5. **Structures**
6. **Digital world: Programming**

Implementation

- We use 'KAPOW' as a source of high quality planning for our teachers.
- Each class is taught Design Technology weekly for half a term every term.
- High expectations and 'Cultural Capital' is gained by:
  - Using **high quality literature and texts** across the curriculum.
  - Valuing **'oracy'** and teaching high-level **vocabulary.**
  - Using **'authentic'** high quality resources.
  - Making links to **'Primary Futures'** which shows children how what they are learning at school can lead to an interesting, exciting future, job or career.
- Teachers use 'Assessment for Learning' strategies including 'fast feedback' and the 'Teacher Assessment Record' to check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback.
- In Design Technology we develop sticky knowledge by:
  - Building opportunities for retrieval practice within the topic E.g Through low stakes mini-quizzes, use of flash cards, multiple choice questions or short 'Q and A' activities.
  - Using 'Flashbacks' to retrieve knowledge and skills from last week, last term and last year.
  - Using knowledge organisers.
  - Integrating new knowledge into larger key concepts

Impact

- In Design Technology we want learners to develop detailed knowledge and skills and as a result, achieve well. This will be reflected in the 'end-products', pupils' DT books and their evaluations which form the end of unit assessments. We want children to be able to talk confidently about what they have learned and how this is connected to other units of work they have been taught.
- The Subject Leader uses a range of tools to evaluate the Design Technology curriculum including end of unit assessments, staff and pupil interviews. They will ask:
  - Is the curriculum working- what do assessments tell me? Are children progressing?
  - What impact is the curriculum having? If children are not progressing, is my subject sequenced correctly? Are layers of learning there? Are we revisiting things enough? Is teacher subject knowledge good enough? Are we meeting the needs of SEND pupils?
  - What can/cannot children do? What have they learned/not learned? How do I know?
  - What is this telling me about the organisation and sequence of the DT curriculum?

Reviewed by Ali Pook and Emma Myhill (June 2021)