Dallimore Primary and Nursery School

Subject on a page – Design and Technology

Intent

Scheme – what do we use and why?

We use the KAPOW primary scheme of learning for our Design and Technology curriculum. The scheme was adopted as it was written by primary D and T specialists. The content within the scheme is based on the D and T Association's "Projects on a Page" and beyond. The KAPOW subscription provides Dallimore with a full scheme of work that we have been able to adapt to our context. It also provides a wealth of support for non-specialist D and T teachers.

Does it align to national curriculum? How?

The scheme offers us complete coverage of the aims set out within the National Curriculum.

Pedagogical approaches

The cyclical nature of scheme means that the children will regularly revisit the five key strands:

- Design
- Make
- Evaluate
- Technical Knowledge
- Cooking and nutrition

Children also regularly revisit the 6 key areas throughout their time in school.

- Cooking and nutrition
- Mechanisms and mechanical systems
- Structures
- Textiles
- Electrical systems
- Digital world

By regularly revisiting key strands and areas, we know that children will build on prior knowledge, strengthen the connections between new and existing knowledge and ultimately, strengthen their schemata.

Sequencing of learning

The scheme of learning has been designed as a spiral curriculum.

The following principles are adhered to with our scheme:

- Cyclical – pupils revisit the key areas regularly throughout their time in primary school.
- Increasing depth – when an area is revisited, it is covered with greater complexity.
- Prior knowledge – prior knowledge is revisited when a key area is returned to. This allows pupil to build upon previous learning and develop strong schemata around the key areas.

6 key areas are revisited each year although Electrical systems and Digital World start in KS2.

Teachers' Expert knowledge

The D and T lead has the opportunity to use the materials available through the KAPOW subscription. The subject leader toolkit offers a host of tools that can support the leading of this curriculum area.

Kapow also offers excellent support for non-experts delivering the D and T curriculum. Teacher notes and teacher videos offer support for the staff teaching these lessons.

Semantic and procedural knowledge

How is the key semantic and procedural knowledge mapped out for each unit?

The progression of skills and knowledge document outlines the component parts and distinguishes between skills and knowledge that the children will learn during each unit.

Assessment

Each Kapow lesson provides an overview for assessing children's progress and understanding by providing statements to indicate whether a child is working at the expected standard or greater depth. In addition to this, we are beginning to/intend to make use of the end of unit quizzes that have created by KAPOW. These capture the key knowledge and vocabulary that children will have been taught within each unit.

Vocabulary

Knowledge organisers are available for all units. These knowledge organisers map out the key tier 3 vocabulary that children are expected to learn within each unit for example in the unit 'Navigating the world', year 5 and 6 children are expected to learn words such as Boolean, finite and mouldable.

Impact

Book scrutiny, pupil and staff voice will allow us to assess the impact of our D and T curriculum. Planning scrutiny will allow us to gain an insight into the delivery of component parts. Lesson visits will further exemplify the delivery of component parts and allow leaders to check the effectiveness of the D and T curriculum.