


Full Governing Body Paper – Design and Technology- Update Report		
From: William Ashton	Date: 15.07.2024	
Date of meeting: Monday 22 nd July	Agenda Item No.	
Aim of paper: For the Governing body to review the Design and Technology curriculum		
Action required: For the Governing body to review and note the report.		
Strategic Objective: Curriculum update based on Ofsted 2019 report		

Background

Curriculum update based on Ofsted 2019 report – Intent, Implementation and Impact

Intent

The Design and Technology scheme of work aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our adapted scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. Our Design and Technology scheme of work enables pupils to meet the end of key stage attainment targets in the national curriculum and the aims also align with those in the national curriculum. EYFS (Reception) units provide opportunities for pupils to work towards the development matters statements and the Early Learning Goals. Kapow Primary is an ArtsMark partner and is able to support schools on their ArtsMark journey, inspiring children and young people to create, experience, and participate in great arts and culture.

Implementation

The Design and Technology national curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and Nutrition has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. The national curriculum organises the Design and Technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical Knowledge. We have taken these subheadings to be our 4 main strands:

- Design
- Make
- Evaluate
- Technical Knowledge

Beam's Design and Technology scheme has a clear progression of skills and knowledge within these strands and key areas across each year group. Beam had adapted and modified a third-party (Kapow) scheme of work that clearly reflects the national curriculum expectations and their overview shows which units cover each of the national curriculum attainment targets as well as each of the four strands. The Progression of Skills shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Impact

The impact of our adapted scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/or end of the unit.

We have taken this scheme of work and adapted it so that Beam is covering the expectations of both Design and Technology and the Art curriculum by identifying areas/units/topics/skills that overlap each other, and in turn streamlined some of the topics or units so that the required skills are being properly covered for each year group and each subject requirement. After the implementation of Design and Technology lessons, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and

resourceful members of society. The expected impact of following the Kapow Primary Design and technology scheme of work is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.
- Meet the end of key stage expectations outlined in the National curriculum for Computing.

The curriculum intent is designed to meet the needs of this disadvantaged community. The intent and implementation of the curriculum are clearly embedded through a clear pedagogical approach, structure and sequence. All staff understand the school's curriculum intent and what it means for their practice. All work given to pupils matches the curriculum's aims and composite goals and shows sequence in how knowledge and skills build for future learning.

Next Steps

The next steps for Design and Technology at Beam are to further evaluate areas of instruction, including Pupil Voice sessions and informal observations to ensure consistency between members of staff, between the different year groups, and to ensure that appropriate modifications and adaptations are in place for SEND children to fully engage in each lesson, all with the intention of further strengthening Design and Technology implementation within the school community, as there may be areas that some teachers are unfamiliar with or insecure with subject knowledge. The DT Lead also hopes to do an extensive audit of existing instructional materials and to identify what equipment could be made available for the school (such as batteries, electrical components and construction tools) as this has the potential to become stressful and confusing for staff members.

Next, future CPD opportunities are to take place to help members of staff further develop their ability to deliver quality lessons and to understand how to accurately assess pupil's work, and to identify ways to adapt the existing curriculum topics to better blend with cross-curricular activities, such modifying the Year 3 Castles topic into an Ancient Egyptian pyramid and temple construction.

In addition, as Beam has recently modified our curriculum (as mentioned above) to mesh better with the Art department, the DT Lead is looking forward to finding addition areas or topics that overlap and find ways to further streamline or modify the existing lessons and structure so as to ensure the ease of instruction, assessment and overall enjoyment of the students.

Furthermore, the DT Lead wishes to continue finding ways to network with other schools to be able to observe and learn how they implement DT into their daily curriculum and schedules, for the benefit of both the school and himself.