Subject Leader 2021-2022: Intent, Implementation & Impact

Subject	Design & Technology
Date	17/11/21
Subject Leader	Rebecca Wood

Intent	Implementation	Impact
Curriculum coverage and planning	*Subject teaching and use of resources*	*Outcomes: progression towards end of Key Stage outcomes*

INTENT:	
What do you want your subject to look like at Stephen's?	At St Stephens, our Design & Technology planning and scheme of learning aims to inspire pupils in the full product design cycle enabling them to be innovative and creative problem solvers. We aim to encourage pupils to reflect and evaluate their learning, and that of others, through each stage of the design and making process. Through the scheme of learning we aim to build an awareness of the impact designers and makers have on our daily lives and build this into our planning. Our planning, teaching, and learning enables pupils to meet each end of key stage objective and attainment target of the National curriculum and develop on previous key learning. Through EYFS, KS1 and KS2, Pupils are taught each of the six key learning areas, including: Mechanisms, structures, textiles, cooking and nutrition (food), electrical systems and digital skills.
How does it relate to the National Curriculum?	At St Stephen's, the following outcomes are expected at the end of KS1 in line with the National curriculum: • Design products based on design criteria • Generate and develop ideas and where appropriate, use information and communication technology • Select from and use a range of tools and equipment to perform practical tasks

	- Explore and evaluate a range of existing products - Evaluate their ideas and products against a design criteria - 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. - Use the basic principles of a healthy and varied diet to prepare dishes - Understand where food comes from. In addition to above, the following outcomes are expected at the end of KS2: - 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 their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design - Select from and use a wider range of tools and equipment - 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 - 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. - 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
How does your subject show progression across the school?	Long term planning and skills progression documents outline progression across year groups. Teachers plan activities that link with topics. Where children show a greater ability in this subject, they are encouraged and challenged to further develop their skills. 'Kapow primary' is also used as an additional resource for staff to upskill their subject knowledge and show clear progression through each topic taught.
What experiences of excellence in your subject will children remember?	Within Design & Technology teaching and learning at St Stephens, pupils will have the opportunity to work through the key concepts such as researching, design, making and evaluation. They will also have opportunities to take part in specific DT days, such the 'Christmas DT workshop day' to further enhance their learning experience of Design and Technology.
How does my subject relate to the ethos of the school in terms of RE and Christian values?	Through the teaching and learning of Design and Technology, pupils will have the opportunity to research designers and makers of different diversities and further support their understanding of the world around them.
How is my subject an expression of our school population and community?	During the planning process, Artists, Designers and craft makers to study are chosen carefully to reflect the diversity. Pupils have the opportunity to express themselves and their individual ideas through Design and Technology learning. Design work is also shared within our school community via our social media platforms, twitter and on our school website. Design and Technology projects are also shared and celebrated within full school assemblies to showcase children's talents and abilities.

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How is your subject made accessible for all learners? (SEND/EAL/GD)	Within Design and Technology, lessons are taught practically and encourage pupils to be experimental. Lessons include a range of strategies, including independent tasks, paired or group work, practical activities, and computer-based skills. The variety of strategies provide pupils with opportunities to learn in a variety of learning styles making them engaging and accessible for all learners.
IMPLEMENTATION	
How are teaching staff given expert knowledge of your subject to understand key concepts?	CPD opportunities are provided for staff to upskill their knowledge and understanding of Design and technology. 'Kapow Primary' online resource is also used to demonstrate high quality Design and Technology techniques to pupils and also to upskill teacher's subject knowledge and confidence in teaching this subject.
How is subject content designed and delivered in class to enable children to transfer key knowledge to long-term memory?	Each key area follows the design process of design, make and evaluate with a particular focus on the key skills from either technical knowledge or the cooking and nutrition aspect of the National curriculum. Pupils will have opportunities to revisit previous skills and build on their prior knowledge in increasing complexity, allowing them to build and progress on previous learning.
How do teachers check understanding during learning and give clear feedback?	Learning is evidenced within annotated workbooks and through final project pieces. Teachers give oral feedback within lessons and marking and feedback through our marking and feedback policy.
How is key vocabulary taught and understood in your subject?	Teachers use kapow primary to improve vocabulary within Design and Technology. Children learn key vocabulary for Design and Technology aspects throughout each topic taught.

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IMPACT	
What monitoring exercises do you as a subject leader complete regularly to quality assess the subject?	The impact of Design and Technology teaching and learning at St Stephens can be monitored through formative and summative assessment opportunities. Specific subject leadership time is given regularly to monitor and assess Design and Technology at St Stephens. At the end of each key stage, pupils will be well equipped with a range of Design and Technology skills and the confidence to reflect and evaluate their work. Their skills will include: • 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.
How do you identify which children are working at the expected standard and those who need further support?	Pupils show their overall outcomes and progression in Design and Technology through their annotated workbooks, final project pieces and their evaluations. Teachers evaluate lessons and plan for progression through assessment, marking and feedback.
What are the strengths you found in your subject after your investigations?	Strengths in Design and Technology at St Stephen's include pupils excitement and engagement in learning about the subject. This has been identified through pupil and staff voice questionnaires.
What are the next steps for your subject across the school generally that you have identified?	Next steps for Design and Technology at St Stephen's include: • To continue to upskill and guide staff to develop skills and vocabulary in Design and Technology

	• To continue to research and improve pupil knowledge of a diverse range of designers and makers including visitors to our school. These steps will be implemented by further CPD in Design and Technology.