Subject Design and Technology (DT)

Subject Lead:
Kate Drake

Subject Intent:

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and wellbeing of the nation.

At St Columb Major Academy, we recognize that skills and learning gained through the teaching of design and technology could assist them in everyday life and inspire children to think about their future.

We will strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talent, and those learning English as an additional language (EAL), and we take all reasonable steps to achieve this.

Covid Catch-Up Plans

Providing time for children to investigate using different materials and tools when making their project.

Providing time to evaluate real life products and investigate these against criteria.

Modelling critical thinking and investigative language for pupils.

Transferable writing skills

Oracy: planned opportunities for speaking and listening within groupwork and direct teaching

Cross-curricular use of Maths skills, especially measurement and data handling

Teaching

Subject specific lessons (within a topic-based approach)
Key vocabulary prioritised
Knowledge organisers in place
Sequences of teaching and learning built for each component (built on prior learning)
Assessment through whole class ideas and questions at the start and end of each session.

Personalised Learning

Differentiated learning to meet needs of learners
Use of resources, models, images and word banks.
Focus on key specific skills if required for certain units of work.

Resources

Audited and reviewed, staff made aware of any new resources (new resources bought and donated)
DT association subscription – access to their resource shop.

Cultural Capital

- Investigations into real life items to develop wonder and critical thinking.
- Gaining a practical knowledge on different materials and applying this to the real world.
- Gaining insight into food groups and cookery skills and healthy eating.

Assessment

Marking of learning.
Class discussions at start and end of unit.
KS2 – use of forms to gain understanding of knowledge.
Formative assessments by all adults in all lessons to reframe learning (if required)
KIRF questioning
End of unit composite
Teachers assess against NC objectives and skills/knowledge progression statements
Verbal quizzes
Marking of learning
Pupil conferencing- know more, remember more.

Inclusion - SEND

Quality First Teaching
Planned additional support from adults (and as required)
High Quality Interventions
Differentiated learning
IEP Targets

SEND document – support pupils to access DT

Curriculum Scope and Progression

Exceeds the requirement of the NC through:

Component parts are sequenced to build on prior learning
Disciplinary and Substantive knowledge mapped out across the school
Reconnect lessons to fill any missed, rusty or lost learning
Wider curriculum links.

Working as an innovator.

Breadth of learning planned encompassing both disciplinary and substantive knowledge.
Planned opportunities for cross-curricular links as appropriate.

Monitoring

Curriculum assessment grids.
Book Looks
Learning Walks
Pupil Voice
Intervention Tracking Sheets

Outcomes

To maintain and develop the confidence and ability for all children to solve technological problems.
Children explore the following skills:
Evaluating current products and thinking about how they want to produce their own product. Designing purposeful products for themselves, based on particular criteria.

Disadvantaged Pupils

Quality First Teaching
Planned additional support from adults (and as required)

Transition

Information and data sharing with class teachers.
Links with secondary school to share information

CPD

DT Leaders – meetings with Kernow Learning DT leads
Staff training – January 2021

Strengths

Well resourced.
Staff understanding of the subject has improved.

Next Steps

Provide further CPD to staff sharing ideas and good practice.
Further CPD for staff to think about planning

Standards and interventions tracked termly by SLT and PP Lead Planned interventions as required	Links with secondary school to offer transition days for DT.	Training completed February 2022– Re-designing DT curriculum. Provided by DT association.	Progression of learning throughout school updated and being followed.	CPD for staff to think about becoming innovators rather than re-creating (including extra session to practically make an updated model using own evaluation). Science and DT whole school topic day/challenge day, learning about real life professions. Invite visitors linked with each topic, 1 per year group. STEM/investigating/innovating club. Food Hygiene and Safety qualification.