At Roding, we are 'Free to Achieve.'

Design and Technology

Intent

At Roding, we aspire to ensure that from EYFS through to upper Key Stage Two our learners have the opportunity to participate in a range of Design and Technology projects. These projects demonstrate a progression of skills from one term to the next as well as across academic year groups. There will be evidence of how prior knowledge has been secured and extended within the present academic year. We aim to provide a broad and balanced curriculum that is carefully sequenced to build upon prior knowledge, ensuring that students revisit and refine skills as they progress. The curriculum offers opportunities for pupils to deepen their understanding through well-structured challenges that build on earlier learning and prepare them for future stages.

All students should be able to imagine themselves throughout the learning journey as designers, producers and product evaluators. They should be able to recognise the skills they have developed within a real world environment and be confident with their own application of these skills. Pupils will be accessed by their ability to design, make, evaluate and apply technical skills as well as knowledge.

Key Skills Covered:

- **Design**: Pupils learn how to create purposeful, functional, and appealing designs for a range of users.
- **Make**: They acquire practical skills to select and use tools, materials, and components to bring their designs to life.
- **Evaluate**: Pupils are encouraged to assess and critique their products and those of others, using technical vocabulary to describe strengths and areas for improvement.
- **Technical Knowledge**: A focus is placed on understanding mechanical systems, electrical circuits, and the properties of materials, with an emphasis on correct terminology.

Implementation

Learning is to be evidence in 'floor books'. Within these books standards of presentation and learning must continue to remain high. Each component of the design and technology process must be evidenced. For each unit of study examples of the following pieces of learning must be presented:

- Pre-unit understand (contextual learning).
- Evaluation of real world examples – opportunity to link diverse figures.
- Plans of students own learning outcome.
- Images and alongside these children's captions demonstrating the build or cooking process of their final piece. Images should contribute to a storyboard of the process/skill being demonstrated.
- Student evaluations of their learning.

Across each unit of study the sequence of lessons from the appropriate Kapow unit of study must be covered.

Impact

Once the learning is complete pieces (unless food) are to be displayed until the end of the half term along with captions by the children of the skills they practised. Teachers should make use a range off assessment for learning strategies are used to secure understanding throughout learning time. Students are to be evaluated in the following areas:

- Retention of the principles of design/contextual learning
- On the quality of their evaluation of real world examples.
- The detail of their plan and consideration real world constraints (time, resources, skill, etc.)
- The skills demonstrated by their final piece.
- The quality of reflection within their evaluation.

It is vital that students understand that the assessment of their learning is on-going and not solely based on the final piece they produce. Staff must support children in understanding this and reflect this within their own assessments. Staff will continue to make use of our schools 'non-core assessment grid' to record students' attainment. This is to be completed at the end of each half term as per school policy.

We also intend for all of our students to complete a piece of design and technology home learning (in addition to that which is already done). The focus of this will be them participating in the preparation of a family meal and evidencing this with photographs. This will give our students the opportunity to share with their peers what a typical family meal looks like in their home and allow us to celebrate cultural similarities and differences.