

Roose Community Primary Computing Intent, Implementation, Impact

<u>Intent</u>

At Roose we believe that "a high-quality computing education equips pupils to understand and change the world through computational thinking." (The National Curriculum in England (DfE) 2013)

Computing has deep links with mathematics, science, and design and technology, it is essential to everyday life, and necessary in most forms of employment.

We aim for all children to become autonomous users of computing devices developing the necessary skills to achieve the highest possible standards and prepare them for the rapid advancement of technology in the 21st century.

Therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology (including social media) to model positive use.

Implementation

We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

We use the 'Teach Computing' Curriculum which covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing content (concepts, knowledge, skills and objectives) has been organised into interconnected networks called learning graphs.

The curriculum aims to equip young people with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: computer science, information technology and digital literacy, with the aims of the curriculum reflecting this distinction.

We also have a 3D printer in school and are designed a 3D printing curriculum aligned with many areas of the Teach Computing Curriculum.



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<u>Impact</u>

Within Computing we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves. The success of the curriculum itself will be assessed via the analysis of yearly progress data, conducting regular pupil voice sessions, lesson observations and skills audits. This will then inform future adaptions of the schemes of work and help to ensure that progression is evident throughout school.

In order to demonstrate that we have accomplished our aims, pupils at Roose Primary School should:

- Be enthusiastic and confident in their approach towards Computing.
- Present as competent and adaptable 'Computational Thinkers' who are able to use identified concepts and approaches in all of their learning.
- Be able to identify the source of problems and work with perseverance to 'debug' them.
- Create and evaluate their own project work.
- Have a secure understanding of the positive applications and specific risks associated with a broad range of digital technology.
- Transition to secondary school with a keen interest in the continued learning of this subject.