



# Computing Statement of Intent



## Computing Curriculum - Intent, Implementation and Impact

### Computing statement of Intent

At Seamer and Irton CP School, we believe that 'a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world'. We want our pupils to become confident and competent users of a range of computing technologies. Our intention is that our computing curriculum supports children's creativity, resilience, critical thinking skills and cross-curricular learning so children are engaged, and their experiences enriched. By the time our pupils leave Seamer and Irton CP school, we want them to be able to confidently choose the best technology to fulfil a task.

In addition, alongside the schools robust PSHE curriculum framework, our learners will be aware of responsible internet usage and how to keep themselves safe online.

Finally, we want our pupils to be clear about future opportunities available through studying computing and we wish to empower our pupils with the understanding that computing is accessible to all regardless of gender, socioeconomic and cultural backgrounds and the range of characteristics represented within equality legislation. Our intention is that this will be achieved through storytelling, exposure to computing role models from a range of disciplines and from visitors linked to our local community in computing related roles.



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## Implementation

At Seamer and Irton CP School, we follow the Teach Computing curriculum, created by the Raspberry Pi Foundation on behalf of the National Centre for Computing (NCCE) as a whole school scheme of work. This includes a breadth of knowledge relating to computer science, information technology and digital literacy ensuring all aspects of the National Curriculum for Computing are met. Pupils are engaged as projects are purposeful and demand an outcome.

Our computer curriculum is constructed to offer a high-quality teaching and learning experience based on the acquisition of substantive knowledge, (concept), this consists of facts, rules and principles and the relationships between them. It can be described as 'knowing that'. In contrast, disciplinary knowledge (skill) is knowledge of methods or processes that can be performed. It can be described as 'knowing how'. Based on a spiral curriculum, concepts and skills are progressive and sequential with pupils revisiting themes and consolidating on prior learning throughout.

The objectives within the Teach Computing curriculum are non-negotiable, however, lessons are adapted to meet pupil's needs and where appropriate, linked to the topics being taught across other curriculum areas. Knowledge Organisers are used by teachers and pupils to identify the key concepts and skills pupils should have by the end of each unit.

Additionally, our computing curriculum has been extended to include learning about pioneers within computing and different career opportunities within the sector. Our pupils also have chance to meet professionals from within their community who are experts in specific areas of computing. These are mapped out on the subject progression documents and link to the units being taught (example via link).

[SICPS - Computing Progression Document - Autumn 1.pdf \(seamerirtonprimary.co.uk\)](#)

Learning is scaffolded so that all pupils can succeed and thrive and additional strategies, which are ordinarily available to support pupils who have SEND, are identified. [5. Computing Provision Map - SEND.pdf \(seamerirtonprimary.co.uk\)](#)

Teachers are surveyed annually (September) and provided with year group specific continuing professional development (CPD) where necessary, so they have the knowledge about what to teach, how to question students about it and how to deal with problems of misunderstanding.



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All classes in KS1 and KS2 have a scheduled Computing lesson each week, where they have access to the hardware and software required to teach the curriculum. This is supplemented by additional opportunities to develop digital literacy across the curriculum.

- Every classroom from EYFS to Y6 has a computer connected to the school network and an interactive whiteboard
- Each classroom has an iPad for teacher use and EYFS to Y3 have additional classroom iPads for pupil use.
- There are 4 laptop trolleys containing 80 laptops.
- There is a recently refurbished computing suite containing 16 desktop PCs alongside a teaching TV – **As a school we recognised pupils had limited access to desktop personal computers and keyboards and were unable to accurately use a computer mouse. To address this, pupils in year 2 complete additional sessions on PurpleMash, in their final term.**
- There are two iPad trolleys containing a total of 32 iPads
- The school provides the following physical computing equipment: crumbles, microbits, bluebots, beebots, Lego WeDo.
- There are 16 VR Headsets – providing the opportunity for bringing the curriculum to life using virtual and augmented reality experiences, from visiting far-flung corners of the world to holding the human heart in your hands.
- Newly upgraded wireless internet access is provided throughout all buildings and covers the outside learning areas – these run from a dedicated line.
- Each year group has an allocated computing slot timetabled, TT Rockstars time allocated and devices, including the computing suite and VR headsets, are available for cross-curricular teaching throughout the day.
- Teaching and support staff have access to dedicated PC's and laptops in our staff area, this enables targeted and specific support, and learning opportunities can be provided for our pupils, where needed, on an individual basis.

Assessment information is set out for each unit taught, informing teachers and the subject leader what evidence is required. This is available to view via the following link [6. Computing - Assessment.pdf \(seamerirtonprimary.co.uk\)](https://seamerirtonprimary.co.uk/6-Computing-Assessment.pdf).

Additionally, we embed computing opportunities within other areas of the curriculum, to enhance and enrich learning.



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## Impact

Our Computing curriculum has been developed to ensure that children leave Seamer and Irton County Primary School with the skill set required to competently and safely navigate the digital world. They understand how technology works and how to use it to enhance their lives. Our pupils will understand and appreciate the value of Computing in the context of their own personal wellbeing as well as within technological, creative and cultural industries.

At Seamer and Irton CP School, our children will have gained key knowledge and skills in the three main areas of the computing curriculum by the time they leave our school.

We aim that our pupils should:

- Be enthusiastic and confident in their approach towards computing and talk confidently about the knowledge and skills they have developed over time with the ability to demonstrate their learning.
- Present as competent and adaptable 'Computational Thinkers' who can use identified concepts and approaches in all 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 (and benefits) associated with a broad range of digital technology
- Transition to secondary school with a keen interest in the continued learning of this subject
- Understand and appreciate computing within technological, creative and cultural industries.
- Recognise computing as an accessible subject and possible career regardless of gender, socioeconomic and cultural backgrounds and the range of characteristics represented within equality legislation.

The impact of our Computing curriculum at Seamer and Irton CP School is demonstrated through the regular reviewing and scrutinising of children's concepts and skills, to ensure progression is taking place and the curriculum remains fit for purpose. This is achieved in the following ways:

## **Teachers**

Teachers use the Computing assessment document alongside the assessment resources available to them to ensure the impact on our pupils within lessons and across units is progressive and misconceptions are identified and addressed at the earliest opportunity. At the end of each unit teachers decide upon a 'best fit' judgement as to whether the pupil has achieved and embedded the expected goals, exceeded expectations or are still working towards the goals. These decisions are



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based on the professional knowledge and judgement that teachers possess about the progress of each pupil, which allows an informed judgement of attainment to be made.

## **Subject lead and link governor.**

The subject lead and link governor will regularly review the curriculum and triangulate information to ensure the curriculum continues to have the desired impact for our pupils and to inform future adaptations of our scheme of work. This will be done by:

- Looking at pupils' work, where appropriate, especially over time as they gain skills and knowledge.
- Pupils demonstrating their knowledge and skills through using the hardware and software they are familiar with.
- Talking to pupils about what they know (pupil voice) – focussing on the key knowledge outlined on the half termly knowledge organisers.
- Staff surveys, used to give evidence of the impact of staff confidence in the subject and the further need for any training in specific areas which will be provided by Subject Leader and/or STEM learning courses
- Discussions with teachers and viewing planning, to highlight how and why judgements regarding attainment have been made, allowing consistency checks to be made and ensuring assessment is robust.
- Reviewing summative assessment data and identifying areas for further scaffolding.