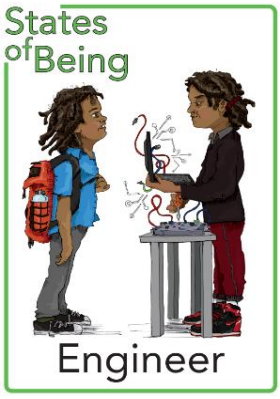
Being a Champion Digital Engineer: an approach to Computing at Filton Avenue Primary



Intent

What is the point of Being a Digital Engineer?

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

The aims of being a Digital Engineer are:

- To understand and respond to spoken and written language from a variety of authentic sources
- To speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- Can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- discover and develop an appreciation of a range of writing in the language studied

Where does it come from?

Being a Digital Engineer is integrated into our curriculum through Curious-city. An enquiry-led, local learning approach to the National Curriculum 2014. This approach recognises that the cognitive maturity of learners affects what and how they learn. It also encourages teachers to think of how they encourage learners to be a Digital Engineer instead of simply teaching them Design and Technology.

Within a Curious-city curriculum, there is no ‘skills or knowledge’ debate. It is seamless blend of both, and through every enquiry, learners are challenged to work independently to prove their understanding of Being a Digital Engineer.

Implementation

What does being a lead Digital Engineer entail?

- Provide encouragement and ideas to staff across the school. Know when Digital Engineer enquiries are happening and speak with the relevant year groups.
- Ensure visits and experiences are carried out and provide support regarding this.
- Monitor content, progression and enquiries and be mindful of coverage 'v' skill acquisition.
- Support with the development of skills and knowledge progressions.
- Lead staff training sessions.
- Drive the development of being a Digital Engineer, sharing best practice.
- Evaluate being a Digital Engineer and complete a Deep Dive analysis.
- Ensure enquiry planning and floor books (or alternative evidence) are sufficient to effectively represent the state of being you lead.
- Lead a group of children to be "Champions" for the subject and use this group to gather different voices across the school.
- With the State of Being Champions, create an annual newsletter for your state of being, which is sent to families and shared on our website and other social media channels. This should celebrate learning, create aspiration and centre children in current affairs for that state of being.
- Working closely with these Champions, have a strong focus on developing pupil voice, ensuring our pupils know their thoughts are valued and providing evidence of the positive impact of our curriculum.
- Lead being an Digital Engineer in line with the school improvement plan and curriculum action plan so that you are sensitive to, and understand how, whole school improvement has to be considered strategically in order to have the best effect and not overwhelm staff.

What is 'covered'?

Essentially, a Curious-city curriculum uses the National Curriculum 2014 areas as a basic foundation of entitlement. However Curious-city is much more than that. It is localised, real-life and challenges learners to apply their learning in unique ways without the support of adults to prove what they have learnt. Local companies, charities, organisations, individuals and objects are used as foci to enhance and instill a sense of curiosity, pride and stewardship.

Impact

How is Being a Digital Engineer monitored and assessed?

Every term, *Being Champions* meet as a team (the Enquiry hub) to discuss and share what they are seeing and hearing and, working as a team, help to review the school's curriculum and contribute to the Enquiry action plan.

Twice a year, Being Champions work with the Enquiry leads to review floor books and enquiry books to ensure coverage and progress across the school for their state of being.

As there is no requirement to formally report attainment of Computing, Being a Digital Engineer is assessed through monitoring how a learner responds to enquiries and whether they show a particular enthusiasm and disposition towards it, or, if they constantly needed support in order to access it. This information is recorded on the Enquiry crib sheets which are kept and used for report writing towards the end of the year. These are then passed on to the next teacher to use to support future learning.

Linguists™

	Lower Key Stage Two						Upper Key Stage Two					
	Year Three: Greetings			Year Four: My daily life			Year Five: The World			Year Six: All about me		
Focus →	People	Places	Stories	People	Places	Stories	People	Places	Stories	People	Places	Stories
↓Progressive National Curriculum Objectives — Context →	'Hello'	Languages in the community	Story	Breakfast	Celebration	Routines	Food	Same languages, different countries	Holidays	Cafe	Travel agent	Autobiog.
Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words	✓	✓	✓	✓	✓	✓						
Appreciate stories, songs, poems and rhymes in the language	✓	✓	✓	✓	✓	✓						
Listen attentively to spoken language and show understanding by joining in and responding	✓	✓	✓	✓	✓	✓						
Speak in sentences, using familiar vocabulary, phrases and basic language structures	✓	✓	✓	✓	✓	✓						
Read carefully and show understanding of words, phrases and simple writing	✓	✓	✓	✓	✓	✓						
Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases							✓	✓	✓	✓	✓	✓
Present ideas and information orally to a range of audiences							✓	✓	✓	✓	✓	✓
Broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary							✓	✓	✓	✓	✓	✓
Understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English							✓	✓	✓	✓	✓	✓
Engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help							✓	✓	✓	✓	✓	✓
Write phrases from memory, and adapt these to create new sentences, to express ideas clearly							✓	✓	✓	✓	✓	✓
Describe people, places, things and actions orally and in writing							✓	✓	✓	✓	✓	✓