Curriculum Offer for Computing

INTENT

How is your curriculum set up and what it the rationale behind it?

Context:

Market Town:

Raise aspirations for all of the children
All children to achieve (21.7% PP – increased over time)
Children starting school with low level of speech, language and communication, including lower vocabulary and many have limited experience.

Driving the curriculum:

Our Mission

Underpinned by our Christian values, we create a happy, caring environment. This empowers each and every unique person to dream, believe, achieve and flourish.

'In the same way you should be a light for other people. Live so that they will see the good things you do' **Matthew 5:16 (ICB)**

Our Vision

At St Peter's CE Primary and Nursery School children and their learning are central to everything we do. As a church school we aim to serve our community by providing an education of the highest quality within a framework of Christian belief and values. We encourage an understanding of the meaning and significance of faith, and promote Christian values through the experiences we offer to all of our children.

Our school values underpin our day to day lives:

• **Fairness**: We act without bias and provide equal opportunities for everyone.
'For we are taking pains to do what is right, not only in the eyes of the Lord but also in the eyes of people.' (2 Corinthians 8:21)
• **Honesty**: We always tell the truth, whilst showing respect for the feelings of others.
''For we are taking pains to do what is right, not only in the eyes of the Lord but also in the eyes of people.' (2 Corinthians 8:21)
• **Teamwork**: We work together to achieve shared goals.
'For the body is not one member, but many' (Corinthians 12:14)
• **Ambition:** We work hard to achieve our aspirations and never give up.
'You did not choose me; I chose you and appointed you to go and bear much fruit, the kind of fruit that endures.' (John 15:16a)
• **Care**: We look after each other, ourselves and our environment.
'A new commandment I give to you, that you love one another, even as I have loved you, that you also love one another. By this all men will know that you are My disciples, if you have love for one another' (John 13:34-35)
• **Respect**: We are thoughtful and considerate to ourselves, others and the environment. 'Do to others whatever you would like them to do to you. This is the essence of all that is taught in the law and the prophets.' (Matthew 7:12)

Our Values are visible around the school as a constant reminder to us all. We are proud to display our Christian values, but strongly encourage a sensitivity to difference and the faiths and cultures of others. We are an inclusive school.

Members of St Peter's school community work together to provide a vibrant and creative learning experience for our children. A safe and secure environment encourages children to be happy, confident and enthusiastic learners and enables them to take risks in their learning. Within a climate of high expectation and challenge, all children are guided, supported and inspired to fulfil their true potential, emotionally, physically, spiritually and intellectually, both during their time at school and in their life ahead.

We value the partnership with parents and carers very highly and encourage them to take an active role in all aspects of school life. We aim to develop a culture of inclusion and diversity in which everyone feels comfortable and welcome.

In order to achieve our vision we aim to ensure that our children understand the importance of being:

• **Respectful**: Each child is thoughtful and considerate to themselves, others and the environment.
• **Ready to learn**: Each child has a positive, confident attitude to learning. They are both physically and emotionally ready to learn.
• **Resourceful**: Each child shows initiative, asks good questions and is prepared to use a variety of strategies to learn.
• **Reflective**: Each child is curious, able and willing to learn from their mistakes and can describe their progress
• **Able to Reason**: Each child is able to make careful decisions based on an ability to explain their thinking, consider all the evidence and choose the most appropriate method. They are encouraged to have lively and enquiring minds which will help them to become good investigators and communicators.
• **Resilient**: Each child is prepared to persevere and stay involved in their learning, even when the process is challenging.

Our Computing curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be. We aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever changing digital world. Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science,

information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly, during children's time in school, to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

Vocabulary Development

In order to develop children's vocabulary, we have identified subject specific vocabulary (which we call tier 3 vocabulary) to support a child's conceptual knowledge and improve their 'cultural capital'. Cultural capital is the background knowledge of the world pupils need to infer meaning from what they read. It includes vocabulary, which, in turn, helps pupils to express themselves in a sophisticated, mature way.

Ambitious curriculum for all

Our Pupil Premium strategy states we will maximise all children's potential by offering them an exceptional quality of education through a curriculum that is ambitious and designed to give all pupils, particularly disadvantaged pupils, the cultural capital they need to succeed in life. We will consistently promote the extensive personal development of disadvantaged pupils, going beyond the expected, and giving pupils access to a wide and rich set of experiences. We will provide opportunities for disadvantaged pupils to build their cultural capital in accordance with our vision to enable all of our pupils to dream, believe, achieve and flourish.

SEND children will have full access to the curriculum.

Use ICT across the curriculum	Computing
ICT is used to support teaching and learning. Accessibility features are used to include pupils with SEN and/or disabilities, as appropriate, eg: keyboard shortcuts instead of a mouse, a wireless mouse, screen filters to cut down glare, increased font sizes for screen extension – fonts used in printed material should not be smaller than 12 pt (24 pt for screen presentations), clear font type (sans serif, Sassoon Infant, Comic Sans), appropriate contrast between background and text, and/or a talking word processor to read out text. Pupils with poor motor control may gain confidence and achieve success through writing/drawing on the computer. Predictive text can encourage pupils to use a more extensive vocabulary and attempt 'difficult' spellings. It can be enhanced by using subject-specific dictionaries.	Resources are at an accessible height for children to reach independently. Colour coded laptops and chargers to support independence. Picture prompts for support for logging on, opening a program, shutting down a device. Headphones are available. More specific adaptions include, for example: using symbol-processing software or a picture communicator for pupils with speech and language communication needs using touch screens, or an alternative mouse or keyboard for pupils with reduced motor skills, or adjusting the screen resolution, or using a bigger screen, for pupils with a visual impairment.

IMPLEMENTATION

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. To ensure a broad range of skills and understanding, Computing is taught across three main strands: digital literacy, computer science and information technology. As part of information technology, children learn to use and express themselves and develop their ideas through ICT, for example: writing and presenting as well as exploring art and design using multimedia. Within digital literacy, children develop their understanding of the safe use of ICT and the ability to apply these skills to solving relevant, worthwhile problems, for example: understanding safe use of internet, networks and email. In computer science we teach children to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. We also teach a progression of Computing vocabulary to support children in their understanding. At St Peter's, we give children access to a wide range of good quality resources and provide cross curricular opportunities for children to apply their Computing knowledge and skills. Online safety is taught within Computing and Character Education. Online safety procedures are communicated with pupils, staff and parents.

CURRICULUM STRUCTURE

Curriculum breadth

National Curriculum
Computing Progression Document
National Centre for Computing Education (NCCE)

Making links –

Cross-curricular links are made through foundation subjects providing the stimulus for multimedia, coding and research projects.
Skills can be used across the subject as well as across other subjects – typing, mouse control, keyboard controls, camera, video, microphone.

Recording – Evidence from each lesson should go into pupil's books with the corresponding learning objective. If there is a series of lessons building up to a final project, there may be a few lessons in one piece of evidence (please add all relevant learning objectives when that piece goes into books). Also note this on your Medium Term Plan so that I know why there may not be evidence in books at certain points throughout the year.

Teaching approaches/Pedagogy
Teaching strategies are varied and are mindful of preferred learning styles and the need for differentiation. The use of hardware is well thought out and prepared in advance. Unplugged sessions can be just as valuable as sessions that include technology.

Progression in Computing

Sitting below each of these is the progression document from Nursery to Year 6.
Document: Progression Document

IMPACT

Assessing Progress – How is it done?

Formative assessments:
Using an end of year assessment sheet, children will be assessed as B - below, WT – working towards, EX – expected or GD – greater depth at the end of each year. An annual report to parents, details progress and achievements made in computing.

Supporting staff/Training: How do you support staff in your subject? What can they expect?

Subject Leads:
Attending network meetings and CPD opportunities and feeding back to staff within school.
Teachers
Feedback provided through book looks/pupil voice and support offered.
CPD training opportunities.
Staff meetings.
Ongoing discussions with staff regarding planning, resources and delivery of curriculum.

Teachers new to school/ECTs
Support from computing lead regarding implementation.
PPA and planning support offered where necessary.
Team teaching where needed.

Teaching Assistants
CPD training opportunities offered
Support and training delivered through TA meetings

Development point:
To develop staff confidence and skills with delivering the Computing curriculum through CPD with the support of Richard Smith and Paul Gerrie, from Amazing ICT.