Our Curriculum Vision

Everything we do, at Lanercost CE Primary School, stems from our children having a life-long love of learning. We are proud of our inclusive environment, which is firmly rooted in a shared Christian ethos and fosters the care and nurture of our school community. As a school, in partnership with parents and carers, we strive to build strong foundations for an excellent education. We enable our children to achieve all of their divine potential by inspiring them and promoting opportunities to delight in their learning as well as allowing them to grow into successful, compassionate, young adults who recognise their role in the community and the ever-changing wider world.

We aim to accomplish this through a loving, structured and joyful environment with consistently high standards of teaching. Our engaging and immersive learning is based upon the National Curriculum (2014), developed from a love of reading and reflects our school's unique circumstances. We make the most of our beautiful location, which is a stone's throw from Hadrian's Wall, Lanercost Priory, Naworth Castle and close to Northumbria National Park.

This brave, broad and rich curriculum motivates all of our children to build concepts, skills and knowledge for life. They become curious learners who are led by enquiry and inspired by a range of real-life experiences and cultural enrichment. Each of our subject leaders has worked hard to craft their subject curriculum to ensure this within their subject.

We know that the greatest way to understand school-life is to become a part of your child's learning journey. We aim to run several shared learning events, workshops and cultural enrichment moments that you can participate in, allowing you to see your child's progress and ventures in school. Please see our school website, social media platforms and school newsletter for the latest parent and community events.

Our vision for our curriculum comes directly from our whole school vision. It has been carefully crafted by our teaching staff in order to ensure that we provide an education that helps every child reach their divine potential and enables them to have a life-long love of learning. Each of our subject-leaders has then designed their subject to stem from an evidence-basis where our vision is threaded through at every point.

Our Vision for Computing

At Lanercost C of E Primary School, we aim to provide all of our children with the skills, creativity and enthusiasm to live in a world that is increasingly dependent on technology. As Stephen Hawking, Theoretical Physicist, Cosmologist and Author said *"Whether you want to uncover the secrets of the universe, or you want to pursue a career in the 21st century, basic computer programming is an essential skill to learn."* We feel that it is essential that all children are equipped to operate in a rapidly changing workplace and to be prepared for the career opportunities that will be open to them. We aim 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. We feel that it is essential that all children develop the confidence, skills, and knowledge that they need, to prepare them for the challenge of a rapidly developing and changing technological world. Our aim is that children become 'digitally literate' – able to use, and express themselves and develop their ideas through, information and communication technology.

We aim for each child to be able to access the Internet and use the World Wide Web in a safe and respectful way. We want no child to feel threatened or unsafe whilst online at school or at home. We help them understand the necessary precautions to take to stay safe online and know where to seek help. We believe the use of computing not only enhances and extends our children's learning across the whole curriculum but also contributes to the motivation and the development of their social skills. With our broad curriculum encompassing 'Computer Science', 'Digital Literacy & Information Technology (Digital Creativity)' and 'Online Safety' we believe we provide the children with the best opportunities to apply their skills creatively which will in turn help our pupils become proficient computer scientists.

Our Teaching and Learning of Computing

Our computing curriculum focuses on developing knowledge and skills in 'Digital Creativity' 'Computer Science', and 'Online Safety' to ensure that children become competent in safely using, as well as understanding, technology. We provide our children with many opportunities to use technology so that as they move through school, children can develop their level of skill. Our Curriculum for Years 1 to 6 was designed using Teach Computing, Education for a Connected World and Project Evolve to create a two-year rolling programme that meets the needs of our mixed-aged classes. One topic of 'Digital Creativity' or 'Computer Science' is taught per half term with Online Safety lessons when necessary to ensure coverage.

Our computing curriculum is designed to help equip children with the necessary skills to use technology to become independent learners. In line with the latest research review (Ofsted, May 2022) our lessons are computing lessons are taught as a discrete subject; however, we provide opportunities for children to use computers to help them in their work; for example, using the Internet to research a history topic or using data loggers in science to record and analyse data. We may also encourage the children to explore ways in which the use of computing can improve their results, for example, how a piece of work could be typed and printed and how this could be edited or how the presentation can be improved. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child.

Teaching Computing in Early Years

Despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, at Lanercost School we provide many opportunities for our Early Years children to use technology to solve problems and produce creative outcomes to support them in the technologically rich world we live in. This will support their progression into KS1. Many areas of the framework provide opportunities for pupils to develop their ability to use computational thinking effectively, such as through undertaking projects involving the concepts and approaches suggested by Computing at School's Barefoot Computing resources. These have been used to create our Early Years Computing Curriculum Computational Thinking; computational thinking is at the heart of the computing curriculum, allowing our children to be ready for this subject by providing them with foundational experiences. The problem-solving of Computational Thinking closely aligns with the Characteristics of Effective Learning. By aligning the EYFS provision to Computational Thinking, our foundation children use the same vocabulary as used by KS1 and KS2 which ensures progression. The Development Matters outlines how effective teaching and learning gives children the opportunity to play and explore, participate in active learning, and create and think critically, the activities that we have included in our EYFS curriculum provide opportunities to meet these criteria where possible as well as linking to other areas of learning as evident in the tables below.

Supporting Teaching and Learning of Computing

We will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability, or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to computing and all staff members follow the equal opportunities policy. Resources for SEND children and children who are working at greater depth will be made available to support and challenge appropriately including in computing.

Our computing lessons are planned with the needs of our children in mind and they provide an inclusive environment where they can feel comfortable and safe to try new things, ask and answer questions, make mistakes, and learn. Lessons and tasks are differentiated to suit the needs of all. We may support our children through the use of different devices or apps, through mixed-ability partner work, or through smaller guided groups with an adult who leads, scribes, and/or supports discussion.

Furthering the Teaching and Learning of Computing

To further the teaching and learning of computing, we regularly invite Martin Bailey from Animate 2 Educate to work with all children across the school where they have the opportunity to explore different devices, and apps on iPads and create projects using different media which link closely to our topics. These opportunities enable children to build on skills learned previously and inspire their creativity.

We provide whole school opportunities to celebrate computing, for example by taking part in a Safer Internet Day competition organised by the Knowsley City Learning Centre. In addition to this, when appropriate, teachers may invite visitors into their PSHE lessons or arrange educational visits to support the delivery of the curriculum content and to allow children to make connections between real-life situations.

In the Early Years, the use of 'Big Book' for the children's whole teaching journey and individual records on Tapestry, allows the computing curriculum to become part of the EYFS learning. In KS1 and KS2, Showbie (our online learning platform) is used to record examples of computing across the year, this can be used to help evidence coverage of the three stands of computing as well as acting as a way of involving children in talking about and sharing their experiences of computing at school. These records are used as a way of reviewing and revisiting learning, for both the staff and children and as a way to showcase the children's developing skills and knowledge.

A computing after-school club is also available for some half terms on a weekly basis for children to attend and explore their interest in Computing.

Assessment of the Teaching and Learning of Computing

At the start of the academic year, classes will create Online Safety Rules based on their previous

knowledge which will be displayed in their classroom. Through this, the computing teacher will be able to see which areas of online safety the class may need to focus on. Using 'Project Evolve', the teachers can add this into their yearly cycle. This enables previous knowledge to be built upon and revisited. This will identify any specific area/s the class teacher needs to cover within their Online Safety lessons.

Assessment will be ongoing, throughout the year. Each Teach Computing block outlines the assessment opportunities for that block. Examples of the formative assessment opportunities are:

- open questioning
- self-assessment showing thumbs up/down related to each success criteria
- class discussion

Examples of summative assessment opportunities are:

- multiple choice questions
- Revisiting of a previous knowledge through a short test.

The Impact of Teaching and Learning of Computing

By the end of the Early Years Foundation Stage, children will present as competent and adaptable 'Computational Thinkers' who are able to use identified concepts and approaches in their learning.

By the end of Key Stage 1, children should understand what algorithms are and also be able to create and debug simple programs of their own. They should be developing logical reasoning skills and use devices to create, organise, store, manipulate, and retrieve digital content. Children should recognise where technology is used outside of school and understand how to keep themselves safe online.

By the end of Key Stage 2, children will be able to create and debug more complicated programs with specific goals and understand concepts including variables and sequence, selection, and repetition in programs. They should have developed their logical reasoning skills and learned how to use websites and other internet services. Children should have a better understanding of using devices for collecting, analysing, and presenting back data and information and be able to select use, and combine a variety of software. They should be able to use technology in a safe, respectful, and responsible way and understand how to stay safe online and how to report concerns about content and contact.

Our Computing Curriculum should provide our children with the confidence, enthusiasm, skills, and knowledge:

- to be able to express and share their ideas and knowledge effectively through information and communication technology (digital creativity),
- to be able to access the Internet and use the World Wide Web in a safe, responsible and respectful way (online safety),
- to be able to input, manage and analyse data using technology for a purpose (digital creativity/computer science),
- to understand and use computational thinking, including writing computer programmes, to solve problems (computer science),
- to understand how digital systems work including practical applications of programming in everyday technology to improve our lives (computer science).