Curriculum Vision Statement: Computing

At Lambley, we value and nurture every child as an individual; as someone who's uniqueness, interests and passions are supported and celebrated. We are a family who learn together, care for one another and make the most of every opportunity. Through our positive attitude, our growing confidence and determination to do our best, all children thrive and are ready to make their mark on the world. We are proud to say that when children leave us, they are ready for 'Life beyond Lambley.
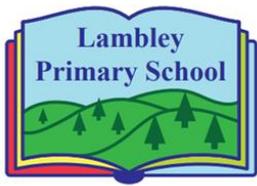
Intent:

Computing is changing the lives of everyone, especially children and young people. Through the teaching of Computing, we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. Computing enables rapid access to ideas and experiences from a wide range of communities and cultures. Using Computing tools: pupils can find, explore, analyse, exchange and present information. We enable them to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. Increased Computing capability promotes initiative and independent learners. It must be our intent to enable all children in the school to develop the knowledge, skills and understanding that will enable them to function in this digital age. Computing skills are a major factor in enabling children to be confident, creative and independent learners.

It is the aim of Lambley Primary School:
- To provide all pupils with their National Curriculum entitlement.
- To ensure that their e-safety knowledge and understanding is up-to-date and secure enough for them to cope with questions and challenges when faced.
- To develop children's individual computing capability to the best of their ability – both in skills and understanding, as well as knowledge.
- To ensure children's computing experiences are progressive, coherent and relevant as they move through our school.
- To apply their Computing skills and knowledge to their learning in other areas.
- To allow all staff and children to gain confidence in, and enjoyment from, the use of Computing.
- To equip pupils with the confidence and capability to use Computing throughout their later life.
- To develop an awareness of the capabilities as well as the limitations of Computing.
- To recognize the potential, and deepen the awareness of the application and necessity of Computing in everyday life.
- To stimulate interest in new technologies.
- To encourage pupils with access to home computers to contribute to and enhance their school work and homework.
- To use computing to keep parents informed in all aspects of school life.
- To plan both teaching and learning of Computing as a discrete subject and the use of Computing as a learning tool across the curriculum.
- To develop staff so that they are able to adapt to the continually changing challenges presented by Computing and in so doing ensure that our pupils receive a Computing education in line with their ability, access and needs.

Implementation:

At Lambley, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers use the 'Purple Mash' scheme, as a starting point for the planning of their computing lessons, which are often richly linked to engaging contexts in other subjects and topics. Knowledge and skills are mapped

across each topic and year group to ensure systematic progression. We have a class set of laptops and a class iPad to ensure that all year groups have the opportunity to use a range of devices and programs for

many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.

The implementation of the curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

Computing across the curriculum:

Cross curricular outcomes in computing are specifically planned for and these are indicated on the whole school Computing Knowledge and Skills Progression Map. The computing provision is also well resourced and specific resources are mapped to specific year groups and topics to support effective teaching and learning. Computing is used to expand the opportunities it presents for many other subjects, for example, TT Rockstars and Mathletics is used to support the learning in maths and use of the internet provides learning opportunities for topic research, leading to presentation opportunities using PowerPoint.

Reading across the curriculum:

As with all subjects, reading skills are very important in building children's knowledge and understanding of computing. Coding requires children to read and comprehend the coding language, before debugging the code. Internet research, word processing and presentation work all require a significant degree of reading prowess, conveying how reading unpins much of the computing curriculum.

Impact:

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The quality of children's learning is evident on Purple Mash, a digital platform where pupils can share and evaluate their own work, as well as on the school's secure internal server. Evidence such as this is used to feed into teachers' future planning, and as a topic-based approach continues to be developed, teachers are able to revisit misconceptions and knowledge gaps in computing when teaching other curriculum areas. This supports varied paces of learning and ensures all pupils make good progress.

Much of the subject-specific knowledge developed in our computing lessons equip pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at Lambley Primary School gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.