Computing
Intent, Implementation, and Impact

Curriculum Intent

At Apley Wood, in Computing, our aim is to ensure that the curriculum offer provides a range of opportunities and experiences to develop the whole child and prepare them for the rapidly changing world in which we live in. With our motto of 'feed the mind and free the imagination', our curriculum is designed to provide pupils with the knowledge appropriate to their year group, and the skills to enable them to be successful across the curriculum. We intend to build and offer a Computing curriculum that provides children with opportunities to explore, analyse, evaluate, and share information effectively, alongside developing critical, computational thinking through problem solving. Digital Literacy is a fundamental aspect within our Computing curriculum. This strand educates our children to become responsible users of technology. We offer exciting and engaging cross-curricular learning experiences that enhance children's creativity and deepens their understanding. We also believe that through knowing more, children will gain disciplinary knowledge and skills, whilst ensuring that children acquire and remember the substantive knowledge first, in a progressive and logical order. Our Computing curriculum is inclusive, high quality, rich and varied throughout whilst remaining relevant to the ever-changing world around us. We, at Apley Wood, strive to equip our children with the skills, knowledge and vocabulary required to be able to contribute safely and positively in the community.

Curriculum Implementation

How do we deliver and assess our computing curriculum?
Our computing curriculum teaches the key substantive knowledge and disciplinary knowledge (skills), through exciting and engaging learning opportunities. We follow the NCCE Teach Computing scheme of work. Teachers are encouraged to adapt and tailor the NCCE Teach Computing planning in order to suit the needs of the children and fit with specific topics within year groups, eg. Year 5 Vector Drawings based on Ancient Greek hoplite soldiers. Each unit is also planned and sequenced to facilitate a natural progression of key skills and knowledge across key stages in line with the National Curriculum.

In order to enhance the scheme of work, at Apley Wood, we have a wide range of technological equipment to enrich the subject such as: laptops, iPads, micro-bits and Beebots, alongside a wide selection of software and apps that allow us to teach the NCCE Teach Computing scheme.

Teachers use formative assessment within lessons to reinforce the concepts being covered based on the lesson objectives and outcomes in the school's scheme of work. These are conducted informally by the class teacher and are used to inform future planning. This ensures that teachers are meeting the needs of all individuals and allows them to progress. Teachers' use of questioning throughout lessons results in real-time addressing of any misconceptions in the moment. Teachers are then able to make summative assessments during and after lessons enabling them to assess progress, capture and record evidence.

Online Safety (E-Safety) is taught regularly throughout the year, at an age-appropriate level and is based on the National Curriculum requirements. Year groups use a range of resources including, Twinkl and Project Evolve. These sessions and the learning that takes place is planned according to need of individual cohorts and the children at Apley Wood.

How do we accomplish this?
The curriculum is designed to ensure a broad range of skills and understanding through the three strands of Computing: Digital Literacy, Computer Science and Information Technology. Digital Literacy is paramount within our computing curriculum and embedded throughout the school. Children are taught to use technology responsibly and respectfully to become positive role models within an increasing digital society.

Our assessment documents clearly identify the key learning required by the end of each unit of work. Through our teaching, we ensure that children know and remember more by revisiting and building on prior learning in units of work and making links between subjects and knowledge whenever possible. Children are given regular opportunities to apply their knowledge in different contexts and explain their understanding to others.

All staff have the opportunity to complete an annual staff audit which enables CPD to be planned throughout the year. Staff also work alongside our Computing subject lead, when any assistance with planning, subject knowledge or opportunities to team teach are recognised or required.

Curriculum Impact

What is the Impact of our computing curriculum? What difference is our computing curriculum making to our pupils?

School leaders, Governors and teachers regularly measure the impact of our Computing curriculum through the monitoring of teaching and learning, assessment, and on-going self-review. The teaching of Computing is monitored termly through book scrutinies, learning walks, link governor meetings, meetings with SME's or pupil voice activities.

We talk to children and parents, undertake learning walks, look at books and Seesaw and we review the curriculum as subject leaders. This results in, as subject leaders, the ability to focus on a specific area and identify key strengths and areas for future development.

Teachers receive feedback from these to ensure that gaps in knowledge and skills (both staff and pupils) is addressed. The recording of summative assessment on yearly subject assessment grids means that teachers are informed of any gaps in knowledge from previous years, allowing for the future planning of units to be adapted to suit the needs of the children.

We aim for the impact to be that our children will be academically prepared for the next phase of their education, with experiences using a variety of technology that the children apply their skills to. Children will develop computational thinking strategies that subsequently support their learning and can develop an understanding of a range of knowledge and skills in order to successfully live in an evolving future world.

We aim for children feel more confident and be able to apply the knowledge and skills being learnt within the Computing curriculum. This is achieved through consistent Computing lessons and regular opportunities within other subjects, through cross-curricular activities, allowing students to embed the knowledge and skills being taught.

At Apley Wood, we want to encourage the acquisition of Cultural Capital throughout our teaching of the Computing curriculum through providing transferable skills, that children will be able to use in future employment. We also provide opportunities within the curriculum where children are able to become aware of being safe online and how they can ensure to keep themselves and others safe online, as well as aiming to develop an appreciation of how the internet can connect people together and provide links within the global community.