

Computing Subject Leader Report



Subject leader: Miss Godfrey

Intention

At Highfield Community Primary School, we strive to deliver a high-quality computing curriculum which allows our pupils to recognise the significance of digital technology in their everyday lives. We explicitly teach pupils the skills and knowledge they need to become creative, digitally literate, computational thinkers. A high quality computing education equips pupils to use computational thinking and creativity to understand and change the world. We want children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their activities. We want the use of technology to support learning across the entire curriculum to ensure that our curriculum is accessible to every child. Keeping safe online is at the forefront of our curriculum to ensure children have a secure understanding of how to use the internet safely. This is also covered during our PSHE lessons.

Implementation

At Highfield Community Primary School, our curriculum has been tailored to meet the needs of our children. It has been ambitiously planned to engage, excite and progress children's learning. Teachers can adapt the learning that takes place throughout computing by using Purple Mash. Purple Mash allows teachers to retrieve prior learning, adapt learning and sequentially move learning on. The units have been designed in a sequentially to meet the needs of the children and to ensure learning has been embedded. Unplugged lessons are present at the start of the unit to enhance inclusion of all within computing and to bring a concept into reality.

Formative assessments are done throughout every lesson. Teachers have access to prior learning in which they can close gaps if needed before moving learning on. Challenges are encouraged throughout lesson to progress learning on for those who require it. Vocabulary is modelled explicitly throughout every computing lesson to ensure children are embedding the key vocabulary. At the end of each unit, teachers will assess each child's work based on their teacher judgements to decide whether they are below, on track or deeper learning. This data is monitored by the subject leader to identify any areas for CPD for staff and potential interventions for children. All work is evidenced in each child's Purple Mash folder or under their individual folder on the server.

At Highfield Community Primary School, children have access to a fully equipped computing room stocked with over 30 laptops to ensure all children have access to their learning within the lesson. Each Key Stage has also been provided with a bank of iPads in which teachers may decide to use based on their tailored teaching. The monitoring of resources is done on a daily basis to ensure the highest of standards throughout the year and to aid the delivery of the computing curriculum. All classes have access to a range of equipment including Bee Bots and a 3D printer. We are now a certified 3D educator school due to the implantation of using a 3D printer in KS2. Each classroom is stocked with an interactive whiteboard. The computing learning journey begins in EYFS where children are exposed to the digital way of life through taking pictures to understand the world and to also record their own evidence of work, completing art work on the iPads and using the interactive whiteboard effectively to enhance learning. Digital leaders work alongside the reception children to prepare them with basic skills to use the laptops and iPads effectively to prepare them for the computing curriculum in year 1. This is progressed through to Year 1 to ensure all children have an equal opportunity of accessing the computing curriculum.

Computing clubs run throughout the year by a range of teachers for each key stage. This club gives opportunities for children to progress their skills and knowledge around computing but also increase confidence and ability for others. These clubs are sequentially and ambitiously planned based on the key stage to ensure skills and knowledge are embedded in our children. Opportunities are given to children to use a variety of search engines and softwares. Due to each key stage having a bank of iPads, computing is used cross-curricular on a daily basis. This gives the children opportunities to further develop their computing skills within a different context.

EYFS

In our early years classroom we use technology as a platform to creatively explore our topics, research our ideas and practise our skills. We support children to learn the basics of internet safety and awareness. We support children with navigating technology safely and explore some of its many purposes through having I-Pad stations within continuous provision. Our children confidently photograph their creations to be proudly shared with their peers,

which develops their independence further. Exploring Beebots exposes children to early coding and programming and encourages prepositional language development. Our children can confidently and independently use the interactive whiteboard for a range of activities to practise skills from the other areas of the curriculum, for example maths eyes, phonics games and digital art. I-Pads are regularly used as a research tool to provide our children with a platform to find answers to their curiosity and understand one of the many purposes of technology. Alongside this, we use Purple Mash to guide our discussions around digital literacy, relevant safe internet use, and begin to raise awareness of appropriate screen time. Our digital leaders support our early years children with learning the basics of accurate mouse control and the use of a keyboard.

SEN Provision

At Highfield we are committed to providing a safe, stimulating learning environment that meets the needs of all pupils, including those with special educational needs. There is a shared expectation that all pupils, regardless of their specific needs, should be offered inclusive teaching which will enable them to make the best possible progress in school and feel like a valued member of the wider school community.

Provision is tailored to more specific needs in Cedar and the Orchard but follows our knowledge-rich, child-led approach.

Impact

Objectives:	Actions	Monitoring – who? when? how? <i>(Observation/Walkthrough/ Book Look/Pupil Interview/Deep Dive/Data Analysis)</i>	Training and support: <i>Internal/Adviser/ Consultant/ School to school support/ CPD / INSET</i>
To identify the gaps in teacher subject knowledge and recognise the needs of teachers.	Staff meeting – identifying the needs of teachers with an open discussion about what they need to teach Computing.	All teachers within a staff meeting	Monitored by Subject lead and curriculum leaders.
To ensure lessons are taught sequentially throughout a unit (use of Coding as example unit)	Using plan on Purple Mash. Invite Purple Mash consultant to school to model how a lessons can be planned in a sequential way (using Coding as example unit)	LG – Discussion with teachers Repeat for Spring and Summer terms	Supported by Curriculum leaders.
Teachers to understand how to deliver a lesson to a class either on iPads or using Computer Room (focus on modelling)	Purple Mash consultant to model a lesson (from the aforementioned planned sequence) – this will create a ‘Highfield Way’ template for lesson delivery	LG – Lesson drop-in Repeat for Spring and Summer terms	Staff meeting
To understand how to assess a unit of work using Purple Mash assessment tool	Following up from planning and delivery of a lesson training (from PM Consultant), staff will be modelled how to ‘Assess’ the unit of Computing to allow for progression from lesson to lesson	LG – Check assessment on the PM assessment tracker end of Spring and Summer	Supported by Curriculum leaders

SL to better understand the progress in Computing since the Covid-19 pandemic	<p>LG to attend 'Preparing for Ofsted' from Teach Computing (Monday 27th June).</p> <p>LG to attend a National College CPD event (Friday 30th) to identify effective subject leadership within Computing to deploy a meaningful curriculum.</p> <p>LG to attend STEM CPD course (Friday 7th October) to update and extend own subject knowledge of the Primary Curriculum.</p> <p>LG to attend St Chad's Primary School to observe subject lead deliver a Purple Mash session. Discussion to be had with subject leader about the delivery on computing in their school.</p>	<p>LG – CPD (27/06/22)</p> <p>LG – CPD (30/09/22)</p> <p>LG – CPD (07/10/22)</p> <p>LG – CPD (14/10/22)</p>	CPD
SL to update policies	Computing policies will be updated in line with changes since online learning after Covid-19 pandemic.	LG	Support by curriculum leaders
To update resources and equipment for pupils and staff	Ashley updated all children's computers to ensure class set with Purple Mash shortcut. Logins for children are all updated. Mr Proctor to provide PPA laptops to staff to ensure that planning and preparation can be effective.	SLT and Computing Team	All Staff
To increase typing fluency across the school	Children to be set '2type' as homework weekly and given as a task at the end of lessons when applicable.	LG – check typing progress in Spring/Summer term	Supported by curriculum leaders