

Subject Leader Report - COMPUTING

COMPUTING LEADER: Amie Dobbs

Subject Overview

Computing education is important for pupils to make sense of and to contribute positively to our technologically diverse world. Our computing curriculum has been developed to equip pupils with the foundation skills, knowledge and understanding of computing they will need for the rest of their lives. Through the programme of study for computing, they learn how computers and computer systems work, design and build programs, develop their ideas using technology safely and respectfully and use IT skills to create a range of content. Computing is taught in mixed ability classes and work is adapted to support and challenge all children. Children have opportunities to work individually, in paired work and within small groups within Computing lessons and also when using IT to support and enhance other subjects.

As opportunities in technology-based companies increase, it becomes ever more important that the children are fully computer literate when they leave school. Computers are now part of everyday life. For most of us, technology is essential to our lives, at home and at work. 'Computational thinking' is a skill that children must be taught if they are to be ready for the workplace and able to participate effectively in this 'digital world'.

At Primrose Hill, we understand clearly our responsibility in preparing children for their next stage of education and for the opportunities, responsibilities and experiences of later life, laying the foundations so that they can take their place successfully in modern British society. We promote a respect for and understanding of different faiths, cultures and lifestyles through learning how to be a responsible digital citizen and communicating safely and responsibly online. Technology provides many opportunities for the children at Primrose Hill to experience and learn about different countries and cultures all around the world. When doing so we teach the children to be respectful and tolerant of others. The need for rules when using technology is vital and that laws exist to keep people safe online. We encourage the children to be ambitious and show excellence, not only in their learning, but also when using IT as a tool to create content in a variety of contexts to express themselves and develop ideas, facilitating the development of our key school values of Courage, Ambition, Respect and Excellence.

Curriculum Mapping Rationale

Our Computing curriculum is carefully planned to engage and excite all of our learners — ensuring children are taught specific knowledge and skills as stipulated in the National Curriculum. Whilst class teachers, with support from the Computing subject leader, have planned some of our Computing units, many units have been selected from schemes including ICT with Mr P and Teach Computing to support staff with subject knowledge and expertise, especially with the Computer Science aspect of the curriculum. The Computing Curriculum Map details the units or areas of Computing covered by each year group every term. These have been arranged to maximise cross-curricular links with other subjects and allow for progression of core knowledge and vocabulary across the key stages, ensuring that each year group's core knowledge and vocabulary builds on the previous year. Opportunities for children to use and apply IT skills to support and enhance other subjects are maximised and varied. These include presenting their work using pictures, sound and animations, using iMovie to present their persuasive advertisement in English and recording and editing sound clips to retell a story.

Although not specifically mentioned in the EYFS framework, Computing remains an important part of the EYFS classroom. Children are taught fundamental skills such as using a mouse, opening and closing apps, taking photographs and inserting text, images and sounds as way to present their work and to develop their understanding

of the world. The children also use programmable devices called beebots to learn about cause and effect and directional language.

Assessment

Ongoing assessment and review is fundamental to everyday teaching at Primrose Hill, teachers are constantly making judgements with regards to attainment in lessons and altering provision accordingly. Prior learning is revisited at the start of units and lessons as a starting point to build upon. Intervention within the lesson is crucial in ensuring children are prepared to learn; misconceptions quickly identified and rectified. Throughout any Computing unit, the pupils are assessed against the key knowledge and skills taught and their knowledge and understanding of the subject. Evidence is collected throughout the year and in a variety of different ways. These include planning checks, pupil interviews, staff discussion and looking at children's work which is uploaded to Showbie and also stored as completed projects on the pupils iPads.

Pupil attainment is reported to parents in their end of year report, stating whether they are working at age related expectations, working at greater depth or working towards the expected standard. Foundation subject trackers are used to monitor the progress of all cohorts as well as groups of pupils including pupil premium, SEND and AGD. End of year data is analysed, any trends or areas of development are identified and this is used to inform the subject development plan. Monitoring also takes place by the subject leader. This includes talking to pupils, using their completed work and knowledge organisers to guide the discussion and provide the subject leader with information to measure how much of the core knowledge and vocabulary has been remembered and understood in each year group. Monitoring pupil work and photographs, planning and also through discussions with teachers, the subject leader is able to effectively monitor the curriculum and ensure high standards.

Apple Distinguished School

Primrose Hill is recognised as an Apple Distinguished School (ADS) in recognition for our innovative and creative use of Apple technology in Computing and throughout all areas of the curriculum. Through our 1:1 iPad programme, we have enthused and empowered pupils to use technology in new and effective ways, to take control, allowing pupils to collaborate and personalise their learning. Technology is also effectively used to break down barriers and to support and overcome specific learning needs.

Enrichment Opportunities

Update and include all relevant visits, visitors and enhancements.

Year Group	Enrichment opportunity	
Whole school	Safer Internet Day – covered over a week. Includes themed assemblies for the week	
_	and all classes had lessons linked to the theme 'Together for a better internet'.	
Year 1 & 2	Computing After School Club – runs each term and allow children opportunities to	
	learn about new apps and develop and extend knowledge of apps covered in	
	Computing lessons.	
Year 3 & 4	Computing After School Club – runs each term to allow children opportunities to revisit and extend knowledge on apps/programs used in class and also introduce them to new apps/programs. They also got to design and make a keyring using a 3D printer on loan through a project with BAE systems.	
Year 5	Year 5 pupils had an opportunity to design a keyring using the Tynker app and then	
	have it printed with a 3D printer through a project with BAE systems.	
Digital Leaders (Y4-6)	The digital leaders have helped with various computing jobs such as organising	
	resources and learning about new apps or programs before they are introduced to	
	classes.	

Review of Previous Subject Development Plan 2024/25

Target	Steps to achieving target	<u>Impact</u>
Develop and monitor physical computing across all key stages.	 Train new digital leaders in using Spheros Bolts and Micro:Bits to support in class. Look at where these can be incorporated into current Computing units and add to planning. Work with teachers. Computing and DT subject leaders to make links with subject specialists at secondary school. Work alongside DT subject leader to identify/create units where physical computing can be incorporated into DT. CPD/staff training as needed. 	 Ongoing Beebots are used in EYFS and KS1 (year 1 mainly). Sphero Bolts have been introduced as part of a computer programming unit in Year 4. Research has been carried out to look into possible Micro:Bit DT units. This target needs to be carried over to the next year.
Look into alternative apps and programs for specific units in year 6 to support teaching.	 Look for alternative apps to use with Computing units. Look at affected planning units and make changed as needed. Reach out to technician, other Computing leads and High schools for support. 	 New Art/sketching app has been identified as a replacement to be introduced this year for digital art units. Can also be used in other year groups too. Affected planning units have been identified. This is an ongoing target and will be carried over.
Explore links with STEM	 Work with Science, Maths and DT leads to identify where computing links across these subjects. Look at where more links can be made. Work with Science lead to incorporate careers linked to when inviting parents into school to talk about careers. 	 Careers day included many STEM related jobs. There was a much greater variety of jobs for pupils to learn about. Parents also volunteers and ran workshops/sessions in different classes, sharing their jobs roles.

Staff training 2024/25:

Staff CPD Undertaken	Impact
ADS London visits to Apple Headquarters x2	Opportunities to meet and network with other colleagues from Apple Distinguished schools. Links made with another local school who is also an ADS.
Inspecting Online Safety	Latest updates regarding online safety were shared. Resources and websites made available.

Current Targets for Subject Development Plan 2025/26

<u>Target</u>	Steps to achieve target	
Develop and monitor physical computing across all key stages.	Train new digital leaders in using Spheros Bolts and Micro:Bits to support in class.	
Carried over	Look at where these can be incorporated into current Computing units and add to planning. Work with teachers.	
	➤ Incorporate physical computing into existing Computer Science units.	
	Computing and DT subject leaders to make links with subject specialists at secondary school.	
	Work alongside DT subject leader to identify/create units where physical computing can be incorporated into DT.	
	CPD/staff training as needed.	

Look into alternative apps and programs for specific units in year 6 to support teaching. Carried over	 Look for alternative apps to use with Computing units. Look at affected planning units and make changed as needed. Reach out to technician, other Computing leads and High schools for support.
Develop the use of iPads to support oracy in classrooms.	 Staff meetings/training to develop the following: How iPads can develop oracy in the classroom. Pupils use iPad to share and talk through their learning. For example: through the use of air server to share screens. Apps are used to record pupils learning. For example: using Clips to record a video with live title, animations to bring a character to life and record audio. Digital leaders can become the experts and help train other pupils when using apps in class. Research other apps that can be used. Use links with other Apple Schools to share ideas.

Planned Staff training and intended impact:

Staff CPD	Intended Impact
Staff meeting for Computing	Training on specific apps.
	Feedback to staff any monitoring findings and actions to inform their planning and
	teaching.
	Updates shared regarding Computing issues, app/program updates.
Apple Teacher training	New staff to work through the Apple Teacher training and achieve the badges.
	To support their teaching and learning through use of iPads in class.