

Computing at Krishna Avanti Primary School

Intent



Within an ever changing and technological world, Krishna Avanti Primary School understands and values the importance of teaching Computing from a young age. We acknowledge that future generations will rely heavily on their computational confidence and digital skills in order to support their progress within their chosen career paths. Therefore, we aim to prepare our pupils by providing them with opportunities to gain the knowledge and develop the skills that will equip them for this ever-changing digital world.

Our Computing curriculum focuses on the progression of skills in digital literacy, computer science and information technology to ensure that children become competent when safely using, as well as understanding, technology. These strands are taught discretely through a range of units during the children's time at school to ensure learning is embedded, skills are successfully developed and applied outside of school. At KAPSH, Computing also supports and promotes opportunities for promoting creativity and cross curricular learning, enriching their experiences in school.

Our key priorities include:

- To ensure a robust assessment system is in place to monitor progression
- To develop subject knowledge and expertise when teaching computing
- To ensure computing is accessible for all learner groups

Implementation



In order to achieve our key priorities, the Computing curriculum is continuously reviewed through monitoring and evaluation by the Subject Leader and Senior Leadership Team. Teachers demonstrate a high level of enthusiasm for the subject content and their expectations of the pupils are driven by the subject progression grids. These have been written with the three core areas of Computing in mind:

Computer Science: The understanding of coding and programming across a range of physical devices and digital resources.

Information Technology: The range of skills required to operate and manipulate specific programs, systems, and content.

Digital Literacy: The knowledge required to use technology safely and to evaluate and react to any potential risks of the online/digital world.

The National Curriculum provides the basis for our progression grid and this content is then accompanied by the NCCE scheme of work. When delivering lessons, teachers are expected to follow the units in this scheme; however, are encouraged to further adapt lessons to make cross curricular links, as well as ensure the lesson is inclusive to all abilities. Cross-curricular opportunities are identified to ascertain links between termly topics and to ensure that Computing is not just seen as a standalone area. Staff are encouraged to share any gaps in their knowledge and skill sets to inform appropriate and individualised training/CPD.

Knowledge and skills are mapped across each topic and year group to ensure systematic progression. The Computing curriculum is also enhanced by 60 chrome books, iPads, Data Loggers and Beebots. Units of work are carefully sequenced to ensure prior knowledge and concepts are built upon, as well as ensuring pupils to develop their recall of embedded knowledge. In our teaching of Computing, we endeavour to expose students to a variety of software, programs, and equipment in order to offer a range of appropriate challenges and experiences. Specific vocabulary for each year group is outlined in the progression maps and this is regularly modelled by teachers within their lessons.

As well as the benefits of ICT, we are also aware of the risks. Therefore, we prepare our children to stay safe online through the block teaching of E-Safety for each year group which is progressive from KS1 to KS2 and underpinned by various key elements. Our children also take part in E-safety week, where we focus on applying their learning to their home life.

Impact



Within Computing we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves, whilst demonstrating computational thinking. The success of the curriculum itself is evident on Google Classroom though lessons posted as assignments and can be accessed via the analysis of yearly progress data, pupil voice sessions, lesson studies and learning walks. This will then inform future adaptions of the schemes of work and help to ensure that progression is evident throughout our school.

By using a variety of on-going formative assessment strategies, our teachers are confident in their children's abilities. This information is then used to feed into teachers' future planning, and as a cross-curricular approach continues to be developed, teachers revisit misconceptions and knowledge gaps in Information Technology, Computer Science and Digital Literacy. This supports varied paces of learning and ensures all pupils make good progress.

When reviewing at the overall impact:

- Every child who leaves our school is confident when demonstrating mouse control, typing skills, keyboard shortcut awareness and file management.
- Staff are passionate and confident in teaching computing and instil independence and resilience whilst promoting computational thinking skills.
- Much of the subject-specific knowledge developed in our Computing lessons equip our pupils with experiences that befit them in secondary school, further education, and future workplaces.