



Computing Subject Rationale

Our vision for Computing

At our school, we want pupils to be masters of technology as we believe that a 'high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.' (National Curriculum, 2013) We want our pupils to be creators and responsible online citizens by developing their understanding of appropriate online behaviour. Our broad curriculum, encompassing computer science, information technology and digital literacy, is designed to instil this.

Content

The content of our Curriculum for computing is based around the National Curriculum and Kapow Primary's online resources.

In EYFS children will have the opportunity to develop computing skills at an early age to foster an interest and confidence in technology, proving advantageous upon entry into Key Stage 1. The children will be introduced to technology how it is used throughout homes and schools. They will then be competent when selecting technology for a range of purposes.

In Key Stage 1, children will begin to develop an understanding of digital literacy and online safety, computational thinking and computers and hardware. This content will be taught through practical sessions linked to the Kapow framework.

In Key Stage 2, children will further their understanding of the three computing strands by having further opportunities to develop as computational thinkers. They will develop an understanding of how technology and digital systems work. Pupils at Abram Bryn Gates will also demonstrate their ability to use technology respectfully and safely as they become competent in digital literacy. Their fluency in problem solving and computer science will be also be consolidated as they move towards developing and creating programs for a range of purposes. This development of computational skills is interleaved throughout our curriculum and therefore enhances the progress made across the remainder of subjects.

Online Safety awareness is also a priority for the pupils at Abram Bryn Gates. We aim for each child to have the necessary knowledge and skills to be able to utilise the Internet safely as we know it is an inevitable element to our modern society. All Online Safety aspects will be covered continuously across the academic year, taking guidance from the Education for a Connected World framework.

Concept

There are three overarching concepts of our computing curriculum: Digital literacy and Online Safety, Computational Thinking and Computers and Hardware. This progressive curriculum will build on

knowledge year on year to deepen and challenge our learners. As a result of our approach at Abram Bryn Gates, our pupils will be able to independently become active participants in a digital world.

Progression of skills and knowledge

Our curriculum has a strong focus on developing children's skills, knowledge and vocabulary by building on their prior learning. This spiral methodology of learning consolidates and embeds children's learning, ensuring that mastery of computing is achieved throughout our setting. Our children are encouraged to have the confidence to investigate, create and explore within their skills and knowledge to develop their computational skills.

Inclusion

At Abram Bryn Gates, we value the assurance that each individual is able to access and use the computing equipment, allowing every individual the opportunity to investigate, create and explore to develop their computing. Providing each child with the exposure and access to a range of technology ensures that every child has the tools to succeed.

Opportunities & Resources

At Abram Bryn Gates, we are a Microsoft Office school, providing children with the opportunity to access a range of technology in order to ensure that they develop a competence by having access to a range of technology to prepare themselves for the modern world.

At present, each class has access to a set of laptops which teachers use for teaching and learning of technology, including innovative hardware and software. The school does not use an ICT suite as Computing is not a static based skill and every tablet and computer within the school is linked to the internet.

Assessment

In computing, assessments will be made over time, promoting the development of pupil's long-term memory. This retrieval practice will be based on evidence of a range of activities across the strand as the 'process' undertaken to arrive at the finished product, algorithm or program is as important as the finished product. The nature of assessment will vary from formative to summative assessments, through observation, quizzes, discussions and evidence of practical lessons - including the progression of skills, knowledge and vocabulary. Teachers will also assess the children against the progression document using the following judgements: emerging; emerging +; developing; developing +; secure and secure +, and will record such judgements using the Insight tracking system.

Monitoring

Following an action plan being completed, the computing lead will work to carry out the tasks; auditing, pupil voice, teacher feedback and observations of practical sessions and surgery days. The feedback will then be shared with colleagues, including what is working well, areas to consider and next steps – this will then be reviewed and will feed into the following academic year's action plan. Our aim is to deliver Quality First Teaching across the curriculum and to achieve this effectively, training for staff will be available as a result of monitoring and identifying areas for development. An example of this would be when staff access CPD from other Computing leaders from other settings. In addition to this, the Subject Leader will also ensure that current computing developments will be reflected in the provision available for computing at Abram Bryn Gates.