



Aspiring Ashwood

Computing

Computing

Intent



The curriculum intent for computing at Ashwood Spencer Academy is to engage, innovate and inspire pupils in a range of computing technologies, creating digitally literate people for the future. Through a cross-curricular approach, computing forms the heart of the curriculum body, complementing other subjects with pupils exploring a range of experiences through their safe and careful navigation.

Through using computers to access the world in a responsible, safe and respectful manner, children develop key transferable skills in collaborative ways. Our pupils are aware of the dangers which can be faced online and know where to go for help and support when necessary. In doing so, pupils become digitally aware, competent computational thinkers who are model global citizens, happy to embrace the new, to help shape their future.

Planning



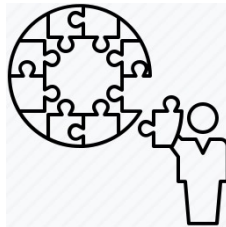
We plan Computing using the National Curriculum, linked to the Purple Mash scheme of work. This is embedded through our computing long term plan.

The objectives for Computing taught at Ashwood Spencer Academy are based on the requirements of the National Curriculum programmes of study for Key Stages 1 and 2 supported through the Purple Mash scheme of work. The Computing Curriculum in school helps children to experience the following key aspects of the programme of study:

In Key Stages 1 and 2 children should study four over-arching strands in computing.

- These are:
- Computer science
 - Digital literacy
 - Online Safety
 - Information technology

Implementation

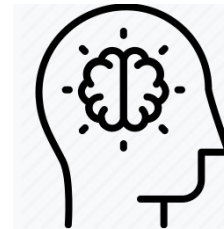


Teachers plan their lessons using the Purple Mash scheme of work which is in line with the national curriculum.

Children have access to resources which aid in the acquisition of skills and knowledge.

Children have substantial access to the hardware (computers, tablets, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications.

Assessment



At Ashwood Spencer Academy children embark on a computing learning journey, supported by the Purple Mash scheme of work. Through the year, children are encouraged to use the Purple Mash platform to save their computing work. This portfolio is evidence of their learning across the different strands of the computing curriculum.

The portfolio follows the child through school, with work being regularly added to it, to showcase the different areas of learning, term by term, year by year.

At the end of each term, teachers make a judgement on pupils' ability in computing using the 5 strands set out for each year group in our assessment of computing document. Children's knowledge and ability is considered in the following areas:

- Create programs
- Using
- Reasoning
- Fundamental Principles and Concepts
- Digital Literacy

Enrichment



Building cultural capital at Ashwood begins with providing our children with the skills they need for the ever-changing real world which will almost certainly have computers and computing skills at the heart of it. Our children have access to a range of devices and computing technologies to give them first hand opportunities to learn and develop their skills in the 3 main areas of computing: computer science, information technology and digital literacy. We are able to give children a range of wider-curricular experiences using computers, helping to support and bring to life the creative curriculum in many different ways. In Year 1 children explore toys and use computer-controlled toys to understand about how toys have changed over time. In Year 5, children use Lego WeDo kits to develop sequencing and debugging skills. Whilst in Year 6 children use literacy skills to develop comic strips on how to follow SMART objectives when communicating with others online.

Linking Learning



Due to the design of our creative curriculum approach at Ashwood, there are many opportunities for Computing to contribute to other curriculum areas.

ICT plays a central part in much of the learning which happens in school complementing the curriculum approach which we follow at Ashwood Spencer Academy. ICT supports learning across all subjects and the use of different learning platforms (Reading Plus+, Showbie, TT rockstars, Learning By Questions etc.) helps to accelerate attainment and enhance teaching.

The access to Purple Mash also allows all subject areas to use computing skills to enhance the curriculum and make it more innovative and interactive. Using the Purple Mash platform, subject areas are clearly highlighted and templates for activities is vast.

Children are taught about being safe online through our Jigsaw lessons. This enables our children to be aware of the risks in an age-appropriate way.

Computing

National Curriculum



Online Safety



The Ashwood Children



Ambitious for DP, SEND and EAL



How is it challenging?



An Ashwood Computational Thinker



Our computing curriculum fulfils the requirements of the National Curriculum. All aims and subject content statements are met by the time the children have completed their Ashwood Journey.

The programmes of study are taught in the allocated key stage. Children begin their journey as computational thinkers through continuous provision in EYFS.

Our pupils are growing up in a world of ever-changing technology. While we feel that the use of technology is a largely positive aspect of modern life, we cannot ignore the risks that can be associated. We have placed a particular emphasis on developing coding skills and online safety and conduct, to ensure we develop competent, considerate computational thinkers.

Throughout school we aim to teach children about:

- The impact of cyber-bullying and what to do if they have been affected.

- To be vigilant when communicating online recognising that people may not always be who they say they are and to be sensible about what they share.

- To tell an adult they trust if something is upsetting them.

- To question the reliability of information given through a web-based source.

- To search responsibly for information while using internet browsers.

Deliberate curriculum choices have been made, where possible, to ensure the curriculum is relevant to the Ashwood children.

Children in our community do not typically have access to suitable devices to support learning; we have ensured that whilst in school children have a range of devices and computing technologies to enhance the computing curriculum.

We have placed a particular emphasis on developing coding skills and online safety and conduct, to ensure we develop competent, considerate computational thinkers.

We know that our children lack cultural capital and knowledge of the world and the influences that led to how the world is today so we have ensured that our computing curriculum is broad, full and equips them to stay safe online.

Our curriculum is ambitious for all children. All children have access to the curriculum and to ensure that children can access it, we ensure that for disadvantaged pupils, we include:

- Experiences of different devices.
- Bringing the outside world in (visitors)

For our SEND and/or EAL children we include:

- Visual representations
- Real-life experiences
- Dual-coding throughout lessons

At Ashwood Spencer we aim to encourage all children to reach their full potential through the provision of varied opportunities. We recognise that our curriculum planning must allow children to gain a progressively deeper understanding and competency as they move through our school. Through our computing teaching we provide learning opportunities that enable all learners to make progress across sessions and over time.

More able learners will be identified as part of our assessment procedures. We will provide for their needs through a framework of high quality first teaching which focuses on ensuring the children are challenged appropriately. In addition, we will focus on developing their learning behaviours, including greater reflection, problem solving and enquiry, making connections, using higher order thinking skills and focusing on independent and collaborative learning where applicable.

Having studied our computing curriculum, an Ashwood child will leave us:

- As computer programmers; by being able to use coding skills to input, program and debug a range of different algorithms.
- As efficient internet users by following and abiding by a set of rules to use the internet and other computing platforms safely, respectfully and with consideration of other users.
- Be online safety champions by understanding what online safety is, how to stay safe whilst online and how as individuals pupils can impact on the computing experience of others.
- As competent computer literate operators.
- Understanding the role computing plays in everyday lives and the career opportunities it can provide.