

AYCLIFFE DRIVE PRIMARY SCHOOL



COMPUTING POLICY

**Updated October 2022
To be reviewed 2024**

Staff Responsible

**Mrs M Green
Miss J Cross**

**Head Teacher
Computing Subject Leader**

Background to Computing at Our School

Our intent is to provide and promote a high-quality Computing education that equips pupils to use computational thinking and creativity to understand and change the world; embedding these into all other core subjects seamlessly. The core of Computing is:

- **Computer Science**, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology.
- **Information Technology**, to create programs, systems and a range of content. Computing also ensures that pupils become **digitally literate**.
- **Digital Literacy**, able to safely use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

At Aycliffe Drive we aim to provide the foundations for understanding the world through Computing knowledge, behaviours and skills that will empower and enable all as competent citizens regardless of social status, race, gender, nationality, and religion; helping to engender an appreciation of human creativity and achievement.

- To achieve, understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- To creatively analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- To actively evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- To be responsible, competent, confident and creative users of information and communication technology.

1 Implementation of Teaching and Learning

When planning for Computing at Aycliffe Drive, we follow the ‘National Curriculum Programme of Study for Computing in KS1 and KS2’ and ‘Understanding of the World’ in the Early Years Foundation Stage. We are supported with this through the use of ‘Rising Stars Progression Framework of Study’. The Rising Stars scheme of work enables us to implement a complete Computing curriculum from Early Years through to Year 6. In addition, it ensures that all aspects of the Computing programme of study is covered; that online safety is paramount and embedded throughout the school; and helps to support every teacher to gain the confidence to teach Computing with easy to access resources and planning. These are amended to ensure its relevance in cross curricular links. We challenge ourselves by exploring and investigating relevant, real life opportunities and ideas at Aycliffe Drive Primary, keeping up with the latest technological trends and ideas.

Computing in school is taught as a stand-alone subject across the key stages. This is where we explicitly teach the three core Computing areas:

- **Computer Science** (problem solving, programming and Logical thinking)

- **Information Technology** (creating content and searching for information across different platforms)
- **Digital Literacy** (online safety and using IT beyond school).

In addition, it is discretely taught in many different contexts throughout different areas of the curriculum, e.g. through Literacy when researching topics, texts and recording ideas; planning writing through storyboard apps; and coding animations to support understanding of texts. Computing is woven into all areas of the curriculum through the careful matching of year appropriate units with cross curricular topic focuses and the regular use of Computing equipment and knowledge through the use of the internet, class laptops, school iPads and apps. Whether Computing is taught as stand-alone sessions or as part of another lesson, we ensure that online safety is included in every lesson to ensure it promotes its paramount importance. This includes whole school focus weeks, such as e-safety week, in conjunction with Safer Internet Day and whole school projects and competitions created in response to the needs of our children in that year.

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

2 Impact of Teaching and Learning

Computing at Aycliffe Drive will ensure that not only will all children acquire the appropriate age related knowledge linked to the Computing curriculum, but also, the skills which equip them to progress from their starting points, an understanding of how Computing relates to their everyday lives and engender a love of computing. Across all of this, our children will gain a deep understanding of the risks involved which in turn empower the children to keep themselves safe and confidently report all concerns appropriately. All of this works together in inspiring confident, innovative children to a belief that they could aspire to a career in computing in the future.

3 Assessment, Recording and Reporting

As Computing is taught separately across the key stages in focused sessions as well as cross-curricular across other subjects, assessment is done in a variety of ways. These include learning walks, book looks, teacher and pupil voice, end of unit self-assessments and pupil reflections. This helps to assess where the children are in their learning, how they are progressing throughout their time at Aycliffe Drive, as well as informing whole school projects and themed weeks needed. Each year group is assessed at the end of each term in accordance with the curriculum requirements. We also record and track all Online Safety concerns. These are dealt with on a case by case basis, by the child protection team, and are used to inform and plan for any ‘gaps in learning’ or issues that arise within that year.