Computing Policy

Acre Rigg Infant School

Last reviewed in : September 2026

Next review due : September 2027

Introduction

Computing is an integral part of modern life. The core of computing is computer science where children will learn how digital systems work and how to put this knowledge to use through programming. A high quality education should ensure that children become digitally literate – able to 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. They need to be able to use technology safely and respectfully.

Aims

At Acre Rigg Infant School we aim to ensure that all children:

- have a broad, balanced and enjoyable curriculum
- are equipped for the ever changing nature of computing
- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Planning

Early Years Foundation Stage: Nursery
Planning in the Early Years Foundation Stage is based on guidance given in the Development Matters document. Development Matters provides an age related progression of skills, knowledge and concepts to inform planning and support children's next steps in learning.

Early Years Foundation Stage: Reception
Planning in Reception is based on the Early Years Foundation Stage curriculum. The Development Matters document is used to ensure progression towards the Early Learning Goals.

Key Stage 1
Planning in Key Stage 1 is based on the National Curriculum Programmes of Study.
Long term plans for Year 1 and Year 2 ensure that the fundamental principles (Computer Science, I.C.T. and Digital Literacy) are covered throughout the year. Teachers worked alongside an Educational Development Advisor to plan and design the Computing curriculum around the topics, ensuring all aspects were covered.

Learning

Early Years Foundation Stage: Nursery

It is important in the early Foundation Stage to give children a broad, play-based experience of I.C.T. in a range of contexts. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote controlled toy. Children use age appropriate software to navigate their way around a computer, improving keyboard and mouse skills. Recording devices can support children to develop their communication skills.

All work is planned to ensure equal access and opportunity for all children. This policy should be read in conjunction with the school's Equality and Diversity Policy.

Early Years Foundation Stage: Reception

Following on from the early Foundation Stage, Reception children will still be given a broad, play-based experience of I.C.T. however it will be more structured in terms of expected outcomes. Children will :

- use simple equipment safely
- complete simple programs
- complete a series of levels on a coding game
- name a range of devices used in homes/schools
- use technology for a particular purpose
- make digital toys and games work successfully.

Key Stage 1

Learning opportunities in Key Stage 1 will be through topics and will be much more structured in terms of expected outcomes. Children will :

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

All work is planned to ensure equal access and opportunity for all children. This policy should be read I conjunction with the school's Equality and Diversity Policy.

Manipulatives

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of I.T., computer science and digital literacy across the school. Resources are classroom based as Computing is taught through continuous provision. Each class has an interactive whiteboard and most have at least 3 computers connected to the school network. They also have access to at least 5 iPads and 6 laptops. The school has a technician who is in school every Friday morning.

Record keeping

Key Stage 1 children have their own personal account with username. They are taught to save their work into these folders therefore developing an electronic profile of pupil's work throughout the school.

Cross Curricular Links

Computing has links with a wide range of curriculum subjects as stated in the National Curriculum. Planning opportunities for children to use computing across other subjects will enable them to use and apply their skills in a meaningful context. Cross curricular opportunities linked to computing are identified specifically at the medium term planning stage when teachers plan topics for each year group. There are many programs and apps that can be used to support subjects across the curriculum and the Computing subject leader is there to support and advise staff on this.

Childrens' Rights

Article 13 - Children have the right to find out things and share what they think with others, by talking, drawing, writing or in any other way unless it harms or offends other people. *(Children are taught to think carefully before posting anything that may cause harm to others. They are encouraged to be respectful online and behave towards others as they would in the real world.)*

Article 16 - Children have the right to privacy*. (Children are encouraged to keep personal details private when online. They are aware of things that they are able to share with others and things that they should keep private.)*

Article 17 - Children have the right to get information that is important to their well-being, from radio, newspaper, books, computers and other sources. Adults should make sure that the information they are getting is not harmful, and help them find and understand the information they need. *(Children are taught that some websites are more reliable than others. They are also taught that some websites/apps/games are appropriate for them and some are not. They are aware of age restrictions and the reasons for these.)*

Assessment

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are taken from the National Curriculum to assess computing each term. Assessing computing is an integral part of teaching & learning and key to good practice. Assessment should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of computing concepts. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment can be broken down into;

- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.
- Summative assessment should review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives.

We assess the children's work in computing by making informal judgments as we observe the children during lessons. Once the children complete a topic of work, we make a summary judgment of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the year group expectations of the unit.

Roles and Responsibilities

Computing Subject Leader

- keep abreast of new developments in the teaching and learning of computing through appropriate in-service training, attending County and Peterlee Partnership network meetings and self-study
- prioritise improvements for the teaching and learning of computing across the school and contribute to the school improvement plan
- audit, organise and deliver in service training for staff in computing
- audit, purchase and organise resources to support curriculum delivery
- lead by example and provide 'expertise' to assist staff in the delivery of the curriculum
- provide support for NQTs and teaching students
- monitor the teaching and learning of Computing across the school in conjunction with the Head Teacher
- support staff with assessment procedures
- evaluate the policy and scheme of work for computing
- liaise with the Governor for Computing
- keep a subject leaders file which is informative and relevant.

Computing Governor

- liaise with the Computing Subject Leader
- visit planned computing events in and/or join computing lessons in school and report back to the Governing Body
- monitor standards across the school in computing and report back to the Governing Body
- attend any County training for governors on computing.

Headteacher

- lead, manage and monitor teaching and learning in computing across the school.