

EYFS Computing and ICT Integration

Rationale

Although Computing is not a discrete subject within the EYFS framework, early experiences with technology form the foundation for digital literacy and computational thinking. In the Early Years, pupils explore technology through purposeful play and cross-curricular experiences that prepare them for the National Curriculum Computing objectives in Key Stage 1.

This approach ensures that children begin to understand the role of technology in their everyday lives, develop confidence in using digital tools safely and responsibly, and build curiosity about how devices work.

Aims

By the end of the EYFS, children will:

- Explore and use a variety of digital devices and technological resources as part of their play and learning.
- Recognise that technology is used in the wider world (e.g., at home, school, and in the community).
- Begin to understand that technology follows instructions and can be controlled.
- Use technology to express themselves creatively (e.g., digital art, music, or photography).
- Develop early awareness of online safety, understanding the importance of asking for help from a trusted adult.

These aims align with the EYFS Statutory Framework (2021) and prepare pupils for the National Curriculum Computing strands of Computer Science, Digital Literacy, and Information Technology.

EYFS Areas of Learning Linked to Computing

EYFS Area of Learning	Computing/ICT Opportunities
Understanding the World	Exploring technology in the environment; recognising the use of technology in different contexts (e.g., cameras, tablets, interactive whiteboards, programmable toys).
Expressive Arts and Design	Using digital tools to create drawings, music, and models; combining different media to express ideas.
Communication and Language	Developing speaking and listening skills through interactive stories, audio

recording, and communication technologies.

Physical Development

Using touch screens, keyboards, and mice to develop fine motor control.

Personal, Social and Emotional Development

Learning to take turns and share equipment; understanding basic online safety principles.

Progression from EYFS to Key Stage 1

EYFS Experience

Leads into KS1 Computing Objective

Exploring programmable toys (e.g., Beebots)

Understanding algorithms as a set of instructions; creating and debugging simple programs.

Taking photographs or videos

Using technology purposefully to create, organise, and store digital content.

Using digital art or music apps

Developing creative content using digital media.

Talking about technology at home/school

Recognising common uses of technology beyond school.

Listening to stories about staying safe online

Using technology safely and respectfully, keeping personal information private.

Practical Implementation in EYFS

Teachers should provide a range of opportunities for children to interact with and explore technology in meaningful contexts. Examples include:

- Using programmable toys to develop sequencing and problem-solving.
- Accessing digital drawing or mark-making apps to enhance creative expression.
- Exploring interactive whiteboards during shared learning sessions.
- Using cameras or tablets to document work, explore the environment, or record learning.
- Listening to stories, songs, and phonics games via digital platforms.
- Discussing safe use of technology through age-appropriate stories (e.g., Smartie the Penguin or Buddy the Dog).

Technology should be used as a tool for learning, not a standalone activity, and always under adult supervision.

Assessment

Assessment in EYFS computing-related learning is observational and ongoing. Practitioners should look for evidence that children:

- Can identify and talk about technology in their environment.
- Show curiosity in using and exploring technological tools.
- Demonstrate basic control and understanding of how technology works.
- Use technology to represent ideas or communicate.
- Begin to show an understanding of online safety.

Observations can be recorded in learning journals or digital portfolios as part of wider EYFS evidence collection.

Online Safety in EYFS

Children are introduced to simple online safety concepts through stories, discussions, and modelling. Key messages include:

- Always ask an adult before using the internet or a new device.
- Tell an adult if something unexpected happens online.
- Understand that not everything online is real.
- Recognise trusted adults who can help.

This early understanding provides a foundation for the formal Online Safety strand in Key Stage 1 and 2 Computing.

Monitoring and Review

The Computing Lead and EYFS Lead will work collaboratively to ensure:

- Technology is available and accessible across the provision.
- Staff receive support and CPD on integrating technology effectively.
- EYFS practice reflects the intent, implementation, and impact of the Computing curriculum as children transition into Key Stage 1.

Summary Statement

Computing in the EYFS is about exploration, curiosity, and purposeful play. By embedding technology across the areas of learning, children develop the early computational thinking, creativity, and digital awareness that form the foundation for future computing learning.