



EARLY YEARS FOUNDATION STAGE COMPUTING AND E-SAFETY OVERVIEW

Understanding the world	Literacy	Physical Development	Communication and language	Personal, social and emotional development	Expressive arts and design	Mathematics
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Understanding the world

Classrooms could contain a role play area with a range of technology, both functioning and model / broken devices, - telephones, tills as part of continuous provision. Ipads used to photograph their learning or for pupils to photograph their own learning, The pedagogical approaches used in this age group should also be carefully considered, which includes the need to tinker, or play, with a device, in order to discover how it functions.

Literacy

Bee Bots continue to be extremely popular in both EYFS and Key Stage 1, and provide a number of opportunities to develop pupils' computing knowledge within literacy sessions. Children could create a story about the Bee Bot's journey, such as around a local area or a country being studied, or they could sequence events within a story being studied. For example, children could guide the Bee Bot between different locations, characters and locations within Little Red Riding Hood. Should devices not be available, the Barefoot website has Fake Bots available, which children can use instead of a digital device. In addition to this, programming devices suitable for young children are being developed by a range of manufacturers, such as the Code-a-pillar by Fisher-Price.

Physical development

Many children entering Early Years settings are already familiar with tablet devices, although their ability to use a keyboard and mouse is often limited. This has recently become a more significant issue, due to the prevalence of tablet devices in the home. It is therefore important that children are given opportunities to become familiar with a range of input devices, including the keyboard and mouse, in order to develop the required fine motor skills. Usage

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could be linked to phonics sessions, such as through the use of drill and practice games, including [Dance Mat Typing](#) or the [Animal Typing app](#), or more creative outcomes, as described when examining the areas below.

Communication and language

Unplugged activities, or those away from the machine, give children an opportunity to develop their understanding of technology without the need for expensive devices. Children could be asked to give precise instructions verbally, such as through giving instructions to a [sandwich making robot](#), with links made to the importance of using the correct vocabulary, along with speaking clearly and precisely. Giving instructions could also form part of sessions linked to physical development activities, such as determining rules for certain playground games.

Personal, social and emotional development

Voice recorders, or the microphone built into a tablet device, could be used to record how pupils are feeling, or to discuss their relationships with others. This could be extended through pupils creating their own videos, which could also link to children giving online safety guidance to their peers on appropriate use of technology and what to do if they feel worried or concerned when using a device. A range of age-appropriate books are now available for young children to examine online safety, such as [Chicken Clicking](#), [Goldilocks \(A hashtag cautionary tale\)](#) and the free [Smartie the Penguin](#). Using voice and video recorders also allows children to self evaluate their own speaking.

Expressive arts and design

The use of painting and graphics applications can further develop pupils' keyboard and mouse skills, whilst a range of tablet based apps are also available, such as the free [Doodle Buddy](#). Creative outcomes can be produced, which allows pupils to take [ownership of their work](#) and could even be part of an extended project. Outputs produced could be linked to other uses of technology, such as producing mats for Bee Beets to travel around, whilst other physical computing devices, such as [Spheros](#), can even be put into paint and controlled using a tablet device to produce images. Outfits for a device to wear, such as Bee Bot head dresses or Sphero paper cup people, could also be developed.

Mathematics

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Controlling devices provides an excellent opportunity to develop pupils' understanding of left and right, along with directional language. Pupils could be asked to guide a device around a shape, or even use activities from computing related websites, such as code.org, to develop their understanding further. However, whilst such activities can effectively engage pupils in programming tasks, their usage should be carefully considered to ensure they have a purpose.

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