



INTRODUCING...

ICT

In the first of a series of articles, **Rachel Ager** explains how technology can best be introduced to the children in your setting...

It is not uncommon to walk into a nursery and see children independently taking photographs of each other using a digital camera. Today's young children are growing up in a world in which technology is so pervasive that to them it is the norm. Because of this it is all too easy to deny that we have a responsibility to teach ICT to children because 'they know more than we do' or because 'they will learn how to use it anyway'. Angela McFarlane, in a presentation at the Naace 2009 Conference, challenged this myth of the 'digital native'. She reported that although

a third of the children in her study were really engaging with technology, a significant proportion were not engaging with it at all and that the remainder of the children really didn't know how to use technology, even if it looked like they did! We need to be clear, therefore, that we do need to teach our young children about technology so that they can all engage with it.

In the Early Years Foundation Stage Framework guidance on appropriate use of ICT is scant and, for the most part, unhelpful. The Development Matters are repetitive and the Early Learning Goals are

too open to interpretation. That said, the Early Learning Goal is a good place to start. It states that by the end of the Early Years Foundation Stage children should "find out about and identify the uses of everyday technology" and that they should "use information and communication technology and programmable toys to support their learning". In other words, learn about technology and then use technology to support their learning.

A chance to play

In the same way that 'mark-making' is a natural prelude to writing, playful use of



Only once **children** are making their own **decisions** about which **ICT** they use, and when, should **attainment** of the **Early Learning** Goal be considered

RACHEL AGER



Playing it safe

IT'S IMPORTANT TO GIVE CONSIDERATION TO MATTERS OF HEALTH AND SAFETY...

1 It's part of the statutory duty to risk-assess each resource we use and check it on a regular basis to ensure that hazards to children are kept to a minimum. When using technology it would be useful to remember that:

- children should never be allowed to handle rechargeable batteries
- where rechargeable batteries are used, the battery cover should be screwed in place
- defunct ICT should have the batteries removed or the electrical cable cut as close to the equipment as possible
- computer workstations should be ergonomically appropriate for the children using them
- if the children use the Internet then they must do so safely.

2 Settings need to understand the behaviours and procedures that will keep children safe when they use toys and resources that incorporate technology. This means:

- practitioners modelling/talking through the safe behaviours with the children
- that only adults should touch electrical plugs and sockets
- that children only handle batteries (never rechargeable) under the supervision of an adult
- typical use of a computer application should be limited to 10–20 minutes at any one time
- children should learn behaviours that will keep them safe when using the Internet.

3 Settings need to understand the behaviours and procedures that will ensure that the toys and resources that incorporate technology do not get broken. This means:

- children learning that they should use the wrist/neck strap when using a digital camera or video camera
- children learning that all toys and resources that incorporate technology should be kept away from water (except those toys designed to be used with/in water)
- resources should usually be returned to a designated place after use
- practitioners modelling/talking about the careful use of toys and resources.

technology is a natural prelude to more purposeful and directed uses of technology. Young children need, therefore, to be given opportunities to use technology within their play prior to using it more formally. For instance, digital cameras could be made available for the children to use, which they can choose to use whenever and wherever they wish (see also the panel on health and safety). During this play the children, when ready, will work out for themselves how the cameras work and this may well be supported by an adult using open-ended questioning such as, "What

happens when you press...?", "How do you view...?". It is important at this stage that the photographs they take are ones they choose to take and not ones they are directed to take by an adult. Only when the children can use the cameras confidently should practitioners start to suggest to the children photographs that they should take, and it is at this point that the cameras become part of the setting's continuous provision. The children should then be proactively encouraged to choose to use the camera whenever they need to take a photograph, for instance, to record

something they have made or achieved.

Over the year a range of technologies can be introduced to the children in this way: metal detectors, digital magnifiers, programmable toys, MP3 recorders, video cameras and, of course, computers with appropriate software. Thus, by the end of the year the children should have a range of technologies available to them within the nursery's continuous provision which they can choose to use whenever they wish to for their own purposes.

Learning in role

Keep in mind...

INTERPRETING THE EARLY LEARNING GOAL FOR ICT REQUIRES CAREFUL THOUGHT...

It's important to remember that the Early Learning Goals are the goals that children aim to achieve at the end of the EYFS, when they are five years-old. This has very real implications for our interpretation of the Early Learning Goal for ICT as, like a number of other Early Learning Goals, its interpretation is subjective. It is all too easy to observe a three-year-old child using everyday technologies and tick the Early Learning Goal as achieved. However, before doing this practitioners should consider how most five-year-olds use and understand everyday technologies, to compare this to the child they have just been observing and decide whether the three-year-old child's understanding of the technologies is as good as the average five-year-old's. In nearly every case the three-year-old's understanding will not be as sophisticated as the five-year-old's, and therefore the three-year-old child is not achieving the Early Learning Goal for ICT.

Whilst children are developing their understanding of these technologies, practitioners should be drawing their attention to the technology that's being used in the world around them, from mobile phones to pedestrian crossings. Practitioners should also provide a positive role model by showing children that adults use technology for their own purposes and by talking to the children about the value they place on this use. In this way children will see technology used for real purposes and will develop the understanding that technologies are tools to be used when they're needed and that they're not used just for the sake of it. They will develop a positive disposition towards technology and a motivation to use it both now and in the future.

Role-play provides the link between the children's world and the setting's environment. It is a vital element in the learning environment, and engages children in play that reflects their lives and gives them opportunities to experience and recreate roles, emotions and relationships. Importantly, it provides children with the opportunity to handle tools, including technological tools, which they see in the world about them. In role-play children can take control of these tools and learn about them and their place in the world without needing to know or learn how to actually work them. Role-play should therefore be resourced carefully and include all the appropriate technologies that one would find in real life.

Supporting resources

SPEAK EASI

Children can record their voices, sounds or music on the move with TTS's new Rainbow Easi-Speaks. This rechargeable MP3 recorder is ideal for Communication, Language and Literacy, and recordings can be downloaded to a PC if you wish. A set of six in rainbow colours is priced at £219.95. Visit tts-group.co.uk



Approaching assessment

As stated earlier, a quick read of the Development Matters is more likely to confuse than edify the reader. They state that at 22–36 months children show an interest in ICT and seek to acquire basic skills in turning on and operating some ICT equipment, at 30–50 months they know how to operate simple equipment, and then, at 40–60+ months, children will use ICT to perform simple functions, such as selecting a channel on the TV remote control.

However, one could argue that the use of the TV remote control fits all of these statements! It's therefore more useful to assess children's progress using the progression described earlier. First children will 'play' with technologies, exploring how they work and what they do; children will then use these technologies for a range of purposes under the direction a practitioner; and finally children will choose to use technologies from the continuous provision, making decisions for themselves about when and which technologies, and this use will be meaningful and purposeful. Only once children are making their own decisions about which ICT they use, and when, should attainment of the Early Learning Goal be considered.

find out more

A former primary school teacher, Rachel Ager is an internationally-respected educational consultant who worked to develop the use of ICT in the EYFS. She is currently Chair of Naace, the ICT association. In her next article, Rachel will continue her look at the Early Learning Goal for ICT. Visit rachelager.co.uk

