Observing children at Play with ICT.

Our observations fall roughly into five groups:

1. Children who are able to use various technological tools with quite a degree of independence. They are able to investigate and navigate software and select programs and tools for a purpose.

2. Children who are very interested in technology, particularly computers or iPads, and have some skills in accessing software/applications but turn to adults for support in navigating screens and for seeing what they could fully offer.

3. Children with less experience of technology. These children often like to look and watch others use technology rather than have a go themselves.

4. Children who show a great deal of interest in everyday technology. These children are curious about how things work and particularly like ICT in role-play. They generally like ICT tools that can be incorporated into their play; e.g. digital cameras where they could see the purpose in being able to keep photographs of things they had made.

5. Children who are not yet that interested in the objects around them and are more focused on their social relationships. This is particularly true of children when they are first settling into a setting.

By looking closely at the observations in each group we can plan for learning and teaching. The following teaching points are presented in four groups that match the observational groups.

Children in group 5 will gradually be supported by Teaching Points 4 as their interest in the learning environment develops.

Teaching Points 1

 Make sure these children know a range of programs so that they can select appropriate ones for their purpose; perhaps a good art package with a range of tools, sorting, matching and discriminating software/applications, ones that encourage language development and collaboration, role-play software/applications and books on screen including apps them allow them to make their own books/stories/animations. Make sure they are familiar with how to use different tools in the software/applications.

- Encourage these children to teach/show other children how to use the applications.
- Encourage these children to use the computer/iPad as a tool and link it's use with away from the computer activities e.g. Design something on the computer to make out of junk or play dough. Make labels to organise toys in the room. Use a simple word processor to embellish a role-play setting. Use the computer to print out artwork and digital photographs. Save their work in a folder for looking back on, sharing with parents and celebrating.
- Encourage these children to use the computer creatively e.g. use a scanner to scan in children's drawings and pictures from story books, sequence digital photographs on a page to retell events, use software/applications that are open ended.
- Model your own use of technology by writing short notes children might need to take home, take photographs or make signs for the classroom.
- Help children to find out information that supports their questions and interests by searching the web with them (check your Acceptable Use Policy – use 'Favourites' or shortcuts to feel confident of the screens that appear)
- Encourage children to talk about technology (especially in context e.g. when using a microwave in cooking or taking a local walk); how they see technology being used in their lives and what purposes it can have.

Teaching Points 2

- Through questioning, explaining and instructing these children can be helped to read the information on the screen, 'What do you think will happen if we click on this button?' 'When you click the cross it closes the program', 'Are there any other buttons we could try?' 'What happens if you click on this picture?' 'This is the main screen, where you can chose the game you want to play' and so on.
- Involve the children in working alongside their peer group and adults. They will learn more about how programs work by watching and participating with other children who are able to navigate programs. Ad
- Use appropriate software/applications. Some software/apps are particularly good for helping children to
 recognise how information can be presented in different ways and for encouraging children to click and find
 out for themselves.
- Encourage learning about control and procedures through a range of technologies: digital cameras, roleplay toys, programmable toys, and remote controls. Children will generalise from their learning particularly if they are encouraged to talk about what they are finding out.
- When planning role-play settings support the children in thinking through the role of technology in any
 particular scenario. Add a computer/laptop/iPad to the role-play area and encourage the children to discuss
 its uses and purposes.
- Model your own uses of technology making the procedures you are following explicit.

Teaching Points 3

- Provide appropriate access to a computer/iPad. Use a child sized mouse. Not all young children manage a
 small mouse and some may need alternative access to a computer until they develop their fine motor
 control enough to manage a mouse. A tracker ball is a good alternative and can be connected to a
 computer at the same time as a mouse giving children choice. The advantage of a tracker ball is that it
 separates the movement of the pointer from clicking; this can be a great help for children in recognising the
 functions of a mouse. iPads or touch screens are excellent for children with additional needs.
- Make sure the computer pointer is set to large so that children can find it easily on the screen.
- Use appropriate software. There are a number of programs about that will encourage children's mouse skills and help them recognise cause and effect.
- Provide frequent supported access to a range of appropriate technologies. Teach children how to work a digital camera, a remote control car, a keyboard, and a programmable toy. Encourage their use of technology in role-play. They will be able to generalise cause and effect from these experiences, have opportunities to build up their fine motor skills, to experience success and to establish problem-solving skills.
- Support children at the computer through task structuring, helping them to gain a measure of success and to continue feeling motivated and delighted to learn.

Teaching Points 4

- ICT in role-play. Make sure there is a varied range of ICT devices in role-play that reflect children's everyday lives. Encourage children to use these toys as part of their play e.g. setting the answer phone with messages, using walkie-talkies or two way headsets for communicating in play, using defunct mobiles and cameras etc.
- Put a computer/iPad in the role-play area and discuss its uses and purposes for different role-play settings.
 Support the role-play with appropriate software/apps
- Make sure that ICT is purposeful: not all children will want to use a computer but they may love listening to songs and stories on a CD Player or iTouch. Help them to learn what the buttons do and what sequences of buttons are needed for different procedures (picture clues help).
- Make sure that ICT is relevant: Personalise resources by using technology e.g. photocopying hands to make place mats, make talking photo albums of events, make cards using digital photographs or their own borders
- Build on children's interests and what they know and can do. If children are very social help them to get to know and to use the digital camera for taking pictures of their friends and family, for taking photographs in and out of the nursery, for taking photographs of likes/dislikes etc. Involve them in the process of printing their photographs and making copies.