

Interplay: Play, learning & ICT in pre-school education

Project grant holders: Lydia Plowman and Christine Stephen

Aims:

Interplay will observe and analyse current practice with information and communications technologies (ICT) in Scottish pre-schools, directly involving practitioners in the research process. This collaborative approach will entail identifying:

- how to create opportunities for learning about and with ICT;
- how to identify and record interactions with ICT that support learning;
- how to evaluate that learning;
- how to use that information for future professional development.

The project will investigate both child-initiated and adult-led activities to examine the educational value of children's encounters with ICT.

Significance: guided interaction & guided enquiry

Guided interaction refers to instances when a practitioner actively assists a child's interaction with the computer, for example through physical or verbal directing or prompting.

Through a process of guided enquiry practitioners and researchers will identify characteristics of guided interaction both with computers and with other forms of ICT.

We will develop a range of tested strategies that are rooted in the dynamics and constraints of pre-school settings, and enhance the interaction between play, learning and ICT.

Framework for enquiry:

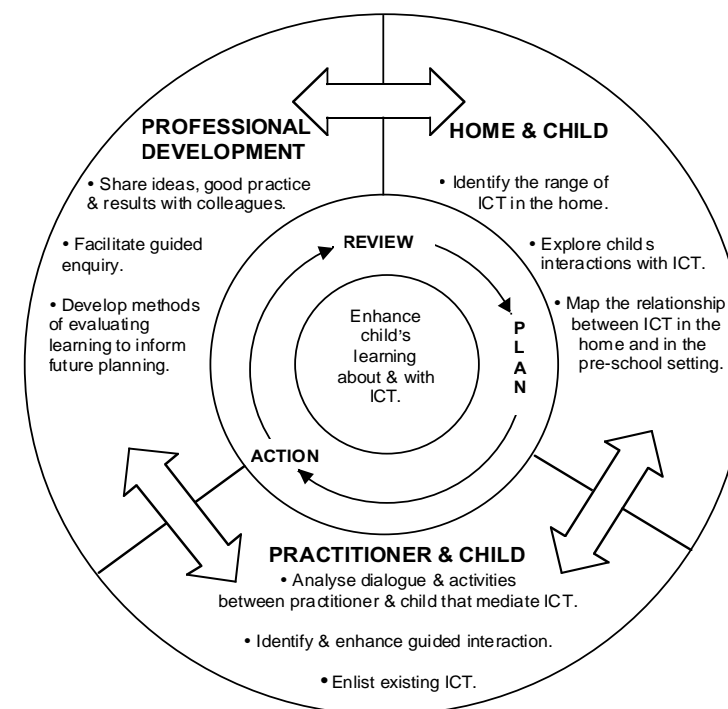
Previous observations have shown that whilst there are many manifestations of ICT in pre-school environments, the focus is mainly on desktop computers. The culture of pre-school settings values learning through play and child-initiated activities, and ICT tends to be viewed as a free play activity in which children decide for themselves when and how to use the computer.

Our recent research for Learning and Teaching Scotland showed that this approach does not always lead to productive learning opportunities.

Existing technologies in the pre-school environment offer a wide spectrum of play and learning opportunities. For the purposes of this study, Interplay will adopt a broader definition of ICT, which includes activity centres, musical keyboards, tape recorders and programmable toys, as well as items such as remote controls, telephones, televisions and computers.

The project will produce outcomes that are usable by practitioners, policy makers and the research community.

Research began in September 2003 and will be completed in August 2005.



Research process:

The research centres on the relationship between play and learning and the role of adults and peers in supporting children's interactions with ICT. The project adopts a systemic approach, examining the use of ICT and play both in the pre-school and in children's homes by using the following methods:

Practitioners and children

- Observations, digital photographs and video recordings of ICT use will be collected in eight pre-school settings from two local authorities;
- Edited versions of video recordings and other sources of data will be used throughout the project to stimulate the guided enquiry;
- Practitioners from each pre-school will meet regularly for twilight sessions to discuss practice and share findings;
- Interviews with practitioners towards the end of the project will be used to establish whether changes in practice have been sustained and to evaluate project outcomes.

Homes and children

- A questionnaire will be issued to a sample of one hundred families from the pre-school sites exploring children's use of ICT within the home.

Findings will be used to inform the process of guided enquiry:

- Eight children will be identified to participate in case studies exploring the interplay between their home and pre-school experiences;
- Video recordings, observations, interviews and family journals will be used to inform pedagogical practice, establishing ways of building on children's experiences at home and addressing the needs of children who have limited access to ICT.

Partnerships:

Interplay is associated with the 'InterActive Education' project based at the University of Bristol. Interplay complements the Bristol project by extending their area of enquiry from school and post-school education into pre-school settings.

The project has been developed in collaboration with Learning and Teaching Scotland, a government-funded agency which develops the curriculum and the role of ICT in promoting learning in Scotland. The study will benefit from a partnership with a BECTA-funded research bursary managed by Joanna McPake.



A practitioner working alongside two pre-school children.

Research team:

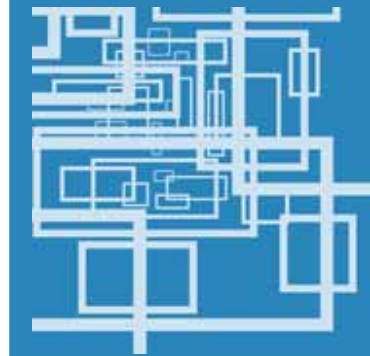
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