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ICT as a mediator in learning and teaching



Figure 1. The role of ICT in learning

Figure 1 carries the message that ICT learning is fundamentally a social process. The learning that is connected to ICT is at first interpersonal and it is culture mediated and gradually adapted. Along with the adaptive nature of ICT learning there is the agentive nature of children's learning. Children produce new content and they do it with others too.

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Instrumental tools		Producing tools
 Child's motives are important for understanding the purpose of the ICT use. The purpose is the key to the content and dynamics of children's ICT use. Even the same work on ICT carries different meanings and outcomes. The teacher needs to help the child to express himself or herself. The teacher discusses the children's needs, opportunities and strategies with children and helps in their realization. 	ICT as a tool for personal, social and cultural production	 Children work on something and it results in new action. The teacher observes the process and partakes in it. When new things happen, the teacher gets into a new position with new things to learn. The teacher needs to keep in contact with the evolving process to keep in contact with the new ICT content. There is an air of making cultural development together.
starts inside the child	_	
Actual development		Proximal development
• The teacher needs to see and find out about the deficiencies and advances in children's ICT use.	L	• The teacher engages the child in processing content with ICT.
 Teacher concentrates on child's skills to use ICT, child's processes of using information, child's understanding and relation. Teacher observes, tests, and analyses children's use and acquisition of ICT. Teacher teaches children "good ICT use". 	ICT as cultural product, as signs and meaning	 Children's thoughts, emotions and opinions are important and they should be brought into contact with the ICT learning process for better understanding. Teacher helps the child to get in contact with either his or her motivation and provides new content for integration.

Figure 2. The teacher orientations in ICT learning (cf. Reunamo and Nurmilaakso, in press)

Figure 2 describes the different roles of the teachers when confronted with the phenomena concerning ICT. As learning is culturally mediated process the teacher needs to get in contact with the children's thoughts, motives and feelings to facilitate the learning. Teachers have educational objectives to meet and they need to know the level of children's actual development to help children with their deficiencies. Nevertheless, teachers need to leave room also for children's personal aspirations and content, to help children to become the agents of their work. Eventually, teachers and children work together producing new cultural content and ways to interact with others.