Children’s Participation in Constructing the Future School: 
A Study of a Large-Scale Effort Involving ICT

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ABSTRACT
Children are active technology users. Still, a literature review reveals that they are not positioned in a very strong role in large-scale efforts involving information and communication technology (ICT) development. Information systems (IS) literature hardly mentions children in connection to ICT. The authors have examined how children have participated in the development of a ‘future school’ in a large-scale ICT development effort, involving also developments in the domains of pedagogy, architecture and interior design. They identified three established roles for children: the user, the informant and the tester. In addition, the authors identified traces of children’s more genuine participation, hardly addressed in the IS literature but discussed extensively within other disciplines. Therefore, the authors offer a broadened conception of what ‘participation’ may entail for the IS community. They argue that large-scale efforts of this kind would benefit from more active participation by children as it has been acknowledged that children’s participation may lead to improved decision-making.

Keywords: Active Technology, Children, Children’s Role Participation, Future School, Information Communication and Technology

1. INTRODUCTION
This paper explores children’s participation in a large-scale information and communication technology (ICT) development effort. User participation in ICT development has a long tradition within the fields of Information Systems (IS), Human Computer Interaction (HCI) and Participatory Design (PD). However, even though children are an active group of technology users, IS literature seldom views them as users of ICT or participants in the ICT development process. The few IS articles that refer to children see them merely as stakeholders,
somehow affected by ICT rather than using it themselves or being connected to its development in any way. In HCI and PD research, on the other hand, children’s ICT use and their participation in ICT development are more prominent themes. Even a conference series of Interaction Design and Children (IDC) exists.

However, a review of IDC articles, focusing on large-scale efforts involving ICT revealed that even in these efforts the role of children is not very strong.

However, children’s right to participate in decision-making that affects them is recognized in the widely ratified UNICEF Convention on the Rights of the Child. A strong discourse in the disciplines of psychology and sociology among others also advocates children’s ‘genuine’ participation. Within these fields, research has been conducted in many other contexts than ICT development, e.g., in local environment planning and design with active interest in involving children in such processes. It has been acknowledged that children’s participation may lead to better decision-making as children’s interests, concerns, and needs may differ from those of the adults (Ackerman, Feeny, Hart, & Newman, 2003).

The IS field has not yet taken into account children’s right to participate and have their say in decision-making. This paper, however, wishes to contribute to filling this gap. HCI research related to children’s participation has already introduced certain roles for children in ICT development. This study provides a further perspective in the context of a long-lasting, multiparty ICT development effort, which is large also in relation to its geographical scope and user population. The paper further stresses the importance of enabling children’s ‘genuine’ participation. Even though genuine or authentic participation has been called for and tokenistic participation criticized already in the existing IS research (see e.g., Howcroft & Wilson, 2003; Mumford, 1983), researchers have not so far touched upon this issue in connection with children and ICT development.

This paper has its focus on children’s participation in a large-scale ICT development effort related to the ‘future school,’ involving also developments in the domains of pedagogy, architecture and interior design. The effort, ongoing since 2007, concerns an educational network of a Finnish city (local schools and the municipal educational administration). In the effort, the primary focus has been on the development of the concept of the ‘future school’. In the spring of 2007, the city invited applications for development projects from schools in the district. In the invitation, the actors in the schools – teachers and headmasters – were encouraged to participate in developing school culture and in finding the best practices in pedagogy and technology use for the ‘school of the 21st century,’ i.e., the ‘future school.’ Ten of the city schools were selected to take part in the ‘future school’ development effort as ‘Smart Schools,’ pilots in technology use and renewal of pedagogic practices. Another future pilot school, an ‘Integrated Pilot School,’ was under construction in a new urban housing area at the time of the study. The school was to be built as part of a multipurpose centre that also included a library, a nursery school as well as other facilities and services for citizens. Experiences of the best practices from the conducted pilot projects were to be exploited in the Integrated Pilot School, in the existing and future schools of the city network, and elsewhere in the country.

According to the statistics from September 20th, 2009, there were 42 comprehensive schools in the city with 12,258 pupils altogether. Out of these, 3068 pupils studied in the ten Smart Schools.

Not only have the educational authorities of the city and the persons responsible for the prospective ‘future school’ been active in the effort, but also the school staff members and school children. For example, school children have been given opportunities to contribute to shaping their own learning environments in their schools through their representatives. Having entered the scene later we had no opportunity of contributing to the school children’s participation through a research intervention. Instead, the importance of children’s involvement, catering for their needs and drawing upon their compe-
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