



CHILDREN AND ICT: NEW ROLES AND BENEFITS

Seminar organized by the Faculty of Informatics and the Equal Opportunities Service, USI

Recent studies report on how parents' approach towards ICT, and in particular how comfortable or intimidated they are in using it, has a strong influence on their children's attitude too. Looking at statistics, women are overall less at ease with using ICT than men and as they tend to spend more time with and are role models for their children, specially girls, this could have a negative effect on the way this young generation will engage and take advantage of technology. Thus, in order to promote and maintain a positive and constructive approach to ICT and enable young users to exploit it in full, we are here exploring ways to support children in the acquisition of essential literacy skills by using ICT and give them a central role in doing so. The focus of this workshop is on exploring the active role children can play in the design and evaluation of better tools and software for them, with a special emphasis on e-book reading and authoring. In fact, when looking at literacy skills, in particular at reading and considering the same age group, there is clear evidence of boys being weaker readers than girls. We are exploring how technology could support both boys and girls in getting these essential skills. There will be presentations from international experts sharing their experiences in running co-design with children in different contexts, including e-book authoring and reading. We will also hear about user studies exploring how children interact with existing e-books. Issues emerged from presentation will then be discussed in an open session, followed by conclusions and wrap up to close works.

7 November 2011, Room A34 – Red Building

Agenda

- 9.30 **Welcome, introduction and opening of workshop**
Monica Landoni, Faculty of Informatics, USI
Arianna Carugati-Giugliano, Equal Opportunities Service, USI
- 9.45 **Children as Authors - the Theatre of Design**
Janet Read, International Child Computer Interaction,
the University of Central Lancashire, Preston, UK
- 10.15 **Embodied narratives: you play, we co-design**
M. Paloma Diaz Perez, Computer Science Department,
Universidad Carlos III, Madrid
- 10.45 **Coffee Break**
- 11.00 **The impact of e-books on young children's reading habits**
Sally Maynard, Department of Information Science,
Loughborough University
- 11.30 **HEBE: making reading fun**
Luca Colombo and Monica Landoni, Faculty of Informatics,
Università della Svizzera italiana, USI
- 12.00 **Discussion and Wrap up session**
- 12.30 **End of Workshop and lunch**

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Children as Authors - the Theatre of Design

Using examples from design sessions with children of all ages, this talk will outline the innovative approaches used by the ChiCi lab to get maximum value from short design sessions with schoolchildren. Methods including warpspeed design and obstructed theatre will be explained and their use in contexts around authoring of interactive books and materials will be explored.

Dr Janet Read is the principal researcher, and director of the International Child Computer Interaction group at the University of Central Lancashire, Preston, UK. Her main research interests are in exploring methods to better design and better evaluate interactive products for children. Her most cited works are in the evaluation of fun and in the inclusion of children in design studies. She has a particular interest in the use of technology for writing and in the design of cool products. She is the chair of the international IFIP SIG on Interaction Design and Children and is a co-chair of the ACM SigCHI Community of Child Computer Interaction. With Dr Panos Markopoulos from Eindhoven she has authored 'Evaluating Interactive Products for and with Children' and she is also, with Dr Markopoulos, the designate editor in chief of the first International Journal of Child Computer Interaction. She has over 100 refereed papers, has lead masterclasses on child computer interaction in six different countries and has contributed four book chapters.

Embodied narratives: you play, we co-design

Embodied Narratives is a performative co-design technique for creating social games for children, with children. It was created by a group of multidisciplinary researchers at Laboratorio DEI (Universidad Carlos III de Madrid) with the aim to facilitate fast, spontaneous, and embodied activities of idea generation through children's social play in natural and familiar settings. Our first experiences have been carried out in the domain of social games to increase children preparedness about emergency and danger situations, as part of the research done within the nationally funded project urTHEY (TIN2009-09687), which is aimed at deploying web 2.0 technologies to improve citizens' preparation. In my talk I will describe the technique and the main findings of the two workshops we have been involved in the last year.

Paloma Díaz is full professor at the Computer Science Department of Universidad Carlos III de Madrid. With a background in Computer Science (graduate and Ph.D. from Universidad Politécnica de Madrid) she has been always interested in multidisciplinary research so she is a member of the Institute of Culture and Technology (www.uc3m.es/portall/page/portall/instituto_cultura_tecnologia_miguel_unamuno). She is the director of the Interactive systems-Lab DEI research group (dei.inf.uc3m.es). Her research interests mainly focus on web development and design methods, usability principles and practices as well as their practical application to different kinds of interactive systems including e-learning and e-gov. She has co-authored multiple research papers in journals and conferences and served in the program committee of conferences like ACM Interaction Design for Children, En-User Development, Open Design Spaces, ISCRAM or ICALT. She is PI of various research grants funded by public and private institutions. She has been visiting scholar in the Information Sciences and Technology College of Penn State University and at the Media and Graphics Interdisciplinary Center in the University of British Columbia.

The impact of e-books on young children's reading habits

The importance of reading undertaken in childhood cannot be underestimated; it provides a love of reading for pleasure as well as a foundation for the acquisition of knowledge. With the growing interest in computers amongst children, the electronic book is considered to be of significance in their reading habits.

The presentation will examine interactions between children and electronic books over the past 10 years. It will discuss some research investigating the effect of electronic books on the comprehension of child readers, the various developments which have taken place over the 10-year period, and report on some recent research involving currently available portable e-reader devices: Amazon Kindle, Nintendo DS-lite and Apple iPod Touch. Finally the presentation will consider what the future may hold for electronic books aimed at young readers.

Sally Maynard is a lecturer in the Department of Information Science at Loughborough University. Sally's research interests are concentrated around children's literature, children's libraries and electronic publishing. She is the Editor of a journal entitled New Review of Children's Literature and Librarianship.

HEBE: making reading fun

HEBE, Highly Engaging e-Book Experiences, is a SNF funded project started in September 2010, it aims at producing novel interfaces for playing, interacting and reading e-books for children, by studying how to design e-book interfaces (or readers) for children as a way to support children exploring, interacting and reading children books in a creative environment.

In this study we are looking for effective ways to involve children in exploring different type of technology, hardware and software, in order to produce more engaging, usable and fun e-book interfaces for them. Here we will report on the first stage of the project, during which we run a number of observations in two primary schools and explored the social side of reading.

Dr Monica Landoni is a senior researcher at the Faculty of Informatics since January 2007. Previously, she was a lecturer in the Department of Computer and Information Sciences of the University of Strathclyde since 1998 and spent 2005 on a sabbatical position at PARC (formerly Xerox Parc) in Palo Alto, USA. She holds a PhD in Information Science, Department of Information Science, University of Strathclyde, 1997 and a Laurea in Scienze dell'Informazione from Università degli Studi of Milan.

She has authored more than thirty papers in the area of Electronic Publishing and Hypermedia. In the past she has been involved in a number of projects, including the JISC Project EBONI, Electronic Books ON-screen Interface, EU Projects: STAMP, PENG, REVEAL-THIS and PuppyIR, as well as SNSF sponsored: DEDUCE and HEBE. Her research interests lie mainly in the fields of Information Retrieval and Electronic Publishing, particularly in the area of design and evaluation of user interfaces for electronic books. Other interests include: Hypertext and Hypermedia, Human Computer Interaction, Affective Computing, Electronic Libraries, and E-learning.

Luca Colombo is a doctoral student in the faculty of Informatics at USI, currently working on the HEBE project where he is combining his two main research interests: HCI and Multimedia Publishing. He is also interested in Graphic Design and Digital Typography, areas he explored in his previous academic life.