IDC 2013 Full Day Workshop

Interactive technologies that enhance children's creativity

from design to fabrication

Abstract

Creativity and imagination play a key role in human learning and children's development. This workshop aims at promoting the discussion on interactive technologies that enhance children's creativity. Questions of interest include, but are not limited to: what is creativity in the first place, and how to design, develop and evaluate technologies that enrich children's expressive power, as well as abilities to think "laterally" (out of the box). We seek contribution on the design of tools that encourage young people to explore differently their environment, to capture their experience of the world, to crystallize and transform these occurrences in a creative way.

Call for particpation

Most educators would agree that creativity and imagination play a key role in human learning. And yet, as children grow older, they enjoy less and less opportunities— at least in classroom settings— to "unleash" their imagination, to bring to life their wildest dreams, and to put their abilities to envision and play out alternatives in their minds at the service of their intelligence. Fair enough, the children may go to art classes, and the arts start to be included in STEM programs (STE[A]M: Science, technology, engineering, [arts], and mathematics). Yet it is difficult not to trivialize the sciences or the arts when we introduce creativity to learning. Along with Vygotsky [1], we think that imagination is present in all aspects of the cultural life and makes the artistic, scientific and technical creativity possible. Vygotsky defined the mechanisms of imagination and creativity as the experience and the re-elaboration of experience through disassociation, association and mutation.

This workshop aims at promoting the discussion on interactive technologies that enhance children's creativity. Questions of interest include, but are not limited to: what is creativity in the first place, and how to design, develop and evaluate technologies that enrich children's expressive power, as well as abilities to think "laterally" (out of the box). We seek contribution on the design of tools that encourage young people to explore differently their environment, to capture their experience of the world, to crystallize and transform these occurrences in a creative way.

This full-day workshop will bring together researchers, designers, artists who share a common interest in understanding the challenges of designing technological tools and digitally mediated environments to expand the creativity of young people. In the workshop, we are interesting in projects that focus on emerging forms/modes/media/genres of appropriation/production/ distribution of ideas and creations.

The workshop will last one day and will be open for 15 up to 20 people.

Contributions can be theoretical, methodological, technological, and practical, in particular discussing case studies that rely on creativity targeting children. Authors are invite to give a working definition of "creativity". Participants need to read all the papers that will be uploaded on the website and need to prepare two questions that would like to be addressed during the workshop to the other participants.

The workshop will include brief presentations (10-15 minutes) by participants a well as breakout sessions (demos and discussions) during which we will further explore some of the issues that emerged. Organizers will facilitate group work and plenary discussions.

One best paper will be published in the ACM IDC'13 proceedings available through the ACM digital library. All papers will be available on the workshop website (see …). Hoped for outcome: a special issue of the *International Journal of Child-Computer Interaction* (http://www.journals.elsevier.com/international-journal-of-child-computer-interaction).

Please notice that:
- At least one author of each accepted position paper must **register for the conference and the workshop** by the early registration deadline (to be announced).
- Workshop participation will be open to any IDC 2013 participant, upon place availability. **All attendants must register for both the workshop and the IDC conference itself**.

Position papers should be in ACM SIG Proceedings Format, must not exceed four pages, and should be emailed as a PDF file to the workshop organizers (francoise.decortis@univ-paris8.fr, elisa.rubegni@usi.ch, anne.bationo-tillon@univ-paris8.fr, edith@media.mit.edu).

Important Dates
Submission deadline for workshop position papers: **March 18, 2013**
Notification of acceptance for submitted position papers: **April 19, 2013**
Camera ready versions of accepted papers: **April 29, 2013.**

Workshop organizers

Françoise Decortis is Professor at the University Paris VIII since 2009, Françoise Decortis leads the research team C3U-Paragraphe. Françoise Decortis main themes of research are the conceptualizations of the narrative activity and an ergonomic approach, emergence of new forms of expression in connection with the technological development, creativity considered as belonging to all and taking advantage of links of the man with his peers and his/her social anchoring. Her activities of research address both adults and children, in working and learning environments, and contribute to develop and to enrich the intergenerational interactions. She is responsible a the project Ergo J'Plus part of the labex Arts H2H.

Elisa Rubegni is a post-doc Fellow at the Università della Svizzera italiana in Switzerland. Her research interests intersect the fields of Human-Computer Interaction, Communication Sciences and Interaction Design. Her focus is on how human activity is mediated by ubiquitous and mobile technology as well as in investigating the socio-technical issues encountered. In particular, whether and under what conditions technology can be an efficient means for supporting learning processes - e.g. tourists, museum visitors, and students. She was involved in many projects in these fields. For instance, the last four years she has been conducting a longitudinal study in schools with the purpose of investigating the creation of Digital Storytelling in formal education.

Anne Bationo Tillon is working as an ergonomist in the Research and Development department of Orange Labs, a telecommunication company, and as Associate Professor at the University Paris 8. Her research focus is on narrative activities, creative and museum activities, studied from a perspective which seizes their intermittent, embodied, finalized, situated and instrumented quality.

Edith K. Ackermann is a Visiting Scientist at the MIT School of Architecture, Cambridge, MA. Current collaborations include the Exploratorium Science Museum, San Francisco, and The LEGO group; Previously, Ackermann was an Associate Professor of Media Arts and Sciences at the MIT Media laboratory, Cambridge, MA; a Scientific Collaborator at the Centre International d'Epistémologie Génétique, under the direction of Jean Piaget, at the University of Geneva, Switzerland. She earned a Doctor of Developmental Psychology; two Master's degrees in Developmental Psychology and Clinical Psychology (1970), all from the University of Geneva, Switzerland.

REFERENCES

[1]   Vygotsky, L.S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology .Vol. 42, N° 1*, Jan-Feb., p. 7 – 97