



Tacchi, J., & Watkins, J. (2007). Participatory research and creative engagement with ICTs.

Originally published in *Proceedings of the Workshop on Sensing on Everyday Mobile Phones in Support of Participatory Research held at the 5th ACM Conference on Embedded Networked Sensor Systems (SenSys), Sydney, New South Wales, Australia, 06 November 2007*

Copyright © 2007 ACM Press.

This is the author's version of the work. It is posted here with the permission of the publisher for your personal use. No further distribution is permitted. If your Library has a subscription to these conference proceedings, you may also be able to access the published version via the library catalogue.



Participatory Research and Creative Engagement with ICTs

Jo Ann Tacchi

Queensland University of Technology
Creative Industries Precinct
Queensland 4059, Australia
j.tacchi@qut.edu.au

Jerry Watkins

Queensland University of Technology
Creative Industries Precinct
Queensland 4059, Australia
jj.watkins@qut.edu.au

ABSTRACT

This paper reports preliminary findings from the *Finding a Voice* project, an ethnographic investigation into the development and consequences of participatory content creation programs in underserved communities in India, Indonesia, Nepal and Sri Lanka. The project explores how information and communication technology can be used to enable both civic and cultural participation, and creative engagement within such communities. The research is informed by Ethnographic Action Research and Participatory Design methodologies, as well as observation of local communicative ecologies.

Categories and Subject Descriptors

H.5.1 [Information Interfaces and Presentation]: Multimedia Information Systems — *evaluation/methodology*

General Terms

Design, Theory

Keywords

Ethnographic Action Research, Participatory Design

1. INTRODUCTION

There are complex interrelationships between social and technological networks, and issues of access versus effective use or engagement [1]. Within the development communication field, a gap exists between technology and development, caused by the rapid evolution and expansion of technologies and technological determinist responses from development agencies [2]. Some argue that this gap is a more fitting focus of our attention than digital divides between developed and developing countries. There is growing recognition that ICT access should go beyond the provision of infrastructure – key factors for sustainable uptake include awareness, engagement, motivations and barriers to use; as well as broader issues of participation in networks, societies and cultures [3,4,5,6].

This paper is based upon preliminary findings from the current major research project *Finding a Voice: Making Technological Change Socially Effective and Culturally Empowering* [7]. This project is funded by the Australian Research Council in

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

Conference '04, Month 1–2, 2004, City, State, Country.

Copyright 2004 ACM 1-58113-000-0/00/0004...\$5.00.

partnership with UNESCO and UNDP. It takes place across a network of 15 community ICT centers in India, Nepal, Sri Lanka and Indonesia. The research investigates the development and consequences of both strategies and processes for participatory local content creation at each study site; through engagement with fixed and mobile digital technologies, as well as more traditional media like radio and TV.

2. CREATIVE ENGAGEMENT with ICT

Whilst new technologies can provide new and interesting ways for civic, political and community involvement, they may also widen existing gaps “further blocking access to those already without access” [8]. In contrast, this research is formed around communication design principles which foreground ‘human’ rather than ‘technical’ determinants of ICT usage [9]. We believe that effective integration requires more than simply providing training in computing and allowing people to use the internet to access information from elsewhere. We explore how ICT can be integrated in ways that prioritize local issues at the community level; and enable underserved communities to both find their voice and to be heard within civic and cultural spheres.

Researchers on the *Finding a Voice* project have worked closely with communities at the study sites to develop local participatory content creation skills using microdocumentary production techniques. This training is characterized by a workshop in which a small group of participants are trained in digital literacy, narrative and content creation techniques in order to produce their own short audio or video stories. A feature of this microdocumentary training is the use of off-the-shelf hardware and applications including digital video and stills cameras and editing software. This form of co-creation can develop new paths for community knowledge whilst enhancing community life [10].

3. METHODOLOGY

These co-creation activities have been informed by Participatory Design (PD), one of the few formal methodologies that considers the user as an equal collaborator within the design process [11]. With regard to *Finding a Voice*, it was realized that the close integration of – and skills transfer between – the research team and participants would be essential to the successful implementation of co-creative community projects: “Really participatory design requires a shared form of life – a shared social and cultural background and a shared language. Hence, participatory design means not only users participating in design but also designers participating in use” [12].

The overall *Finding a Voice* project uses Ethnographic Action Research (EAR). This participatory research methodology combines ethnographic approaches, participatory techniques and action research. Local researchers are embedded within target

communities, and their findings are fed into the development of local initiatives in an ongoing cycle. EAR is therefore a methodology that combines research with project development. It has been designed particularly for ICT-for-development projects, and was largely developed and refined through application and testing in the field of ICT for poverty reduction [13].

3.1 Communicative Ecology

A focus purely on mobile technologies within this area of research could result in rather limited findings. Our experience on *Finding a Voice* has confirmed that in order to understand the potential and real impacts of individual ICTs in any given situation, we need to place this experience within a broader understanding of the whole structure of communication and information in people's everyday lives. Local people generally do not use or think about an individual medium in isolation from other media: each instance of communication or information takes place within an existing 'communicative ecology'; and each community has a unique communicative ecology. There are many ideas we can use to study communicative ecology. Key questions to understanding a local communicative ecology include:

- What kinds of communication activities do local people (wish to) engage in?
- What communications resources are available – content, technologies, skills?
- How do they understand the way these resources can be used?

Through this kind of enquiry, both researchers and practitioners can begin to fully appreciate the complexity of the local context.

4. INITIAL FINDINGS

One of the most interesting creative applications of mobile technology investigated during *Finding a Voice* is the e-tuktuk in Sri Lanka. The e-tuktuk resembles the kind of three-wheel auto rickshaw that is a common form of transport throughout much of South and South East Asia. But closer inspection reveals that the e-tuktuk is a mobile information and communication center, comprising an outside broadcast unit for community radio; and a mobile telecenter with a laptop, printer, phone, CDMA handset connection, loudspeakers and data projector.

The e-tuktuk operates out of the Kothmale Community Multimedia Centre (CMC), located in the hills of Central Province, Sri Lanka. This area consists mainly of small villages, rice paddies and tea plantations. The vast majority of the local population is Sinhalese, with a large Tamil minority. Amongst its many applications, the e-tuktuk travelled to an underserved Tamil community to encourage participation in CMC activities. The e-tuktuk visit encouraged a group of Tamil boys and girls to undertake a computing course at the CMC. This is not a familiar introduction to IT course; rather, the participants are taught to create personal digital stories or microdocumentaries using ICT tools. This kind of creative engagement using ICT encourages learners to talk more openly about their life experiences and the everyday issues that confront them [15].

5. SUMMARY

Digital inclusion is increasingly measured, not by computer or internet access, but by technological fluency and multimedia content creation [1]. Creative engagement describes the ability to create and manipulate multimedia content in ways that serve vernacular interests and enable relatively autonomous cultural participation. This position recognizes that the ICT-for-development debate should extend beyond immediate physical access to technologies, to consider communicative ecologies and local specifications – established using participatory methods.

6. REFERENCES

- [1] Warschauer, M. 2003. *Technology and Social Inclusion: Rethinking the Digital Divide*. Cambridge, Mass, MIT.
- [2] Article19. 2005. *Experiencing Technical Difficulties: The Urgent Need to Rewire and Reboot the ICT Development Machine*. Thematic Reports. London: 45.
- [3] DiMaggio, P. and Hargittai, E. 2001. *From the Digital Divide to Digital Inequality*. Working Paper, Centre for Arts, Cultural and Political Studies, Princeton University.
- [4] Katz, J. E. and Rice, R.E. 2002. *Social consequences of Internet use: Access, involvement and expression*. Cambridge, MA: MIT Press.
- [5] Rice, R. E., McCreddie, M. and Chang, S. L. 2001. *Accessing and Browsing Information and Communication*. Cambridge MA. MIT Press.
- [6] Selwyn, N. 2004. *Reconsidering political and popular understandings of the 'digital divide'*. *New Media and Society* 6(3): 341-362.
- [7] *Finding a Voice*, 20 Sep 2007. <http://www.findingavoice.org>
- [8] Rice, R. and Haythornthwaite, C. 2006. *Perspectives on Internet use: Access, involvement, and interaction*. In *Handbook of New Media*, L. Lievrouw & S. Livingstone, Eds. London: Sage, 92-113.
- [9] Russo, A. and Watkins, J. 2005. *Digital Cultural Communication: tools and methods for community co-creation*. In *Proceedings of International Conference on Engaging Communities*, D. Gardiner & K. Scott, Eds. <http://www.engagingcommunities2005.org>
- [10] Watkins, J. and Russo, A. 2007. *Cultural Institutions, Co-creativity and Communities of Interest*. In *Online Communities and Social Computing*, D. Schuler, Ed. *Human-Computer Interaction International Conference 2007, LNCS 4564*, 212-221.
- [11] Spinuzzi, C. 2005. *The Methodology of Participatory Design*. *Technical Communication*, 52 (2), 163.
- [12] Ehn, P. 1993. *Scandinavian Design: On Participation and Skill*. In *Participatory design: principles and practices*, D Schuler and A Namioka, Eds. Hillsdale, New Jersey.
- [13] Tacchi, J., Fildes, J., Martin, K., Mullenahalli, K., Baulch, E. and Skuse, A. 2007. *Ethnographic Action Research CDROM*. New Delhi. UNESCO.
- [14] e-tuktuk, 20 Sep 2007. <http://www.etuktuk.net>
- [15] Tacchi, J. and Grubb, B. November 2007. *The Case of the etuktuk*. Media International Australia, 125