

# **Methodologies for sense-making in community-based research**

Amalia G. Sabiescu<sup>1</sup>, Sara Vannini<sup>1</sup>, David Salomão<sup>1</sup>, Lorenzo Cantoni<sup>1</sup>, Ammar Halabi<sup>2</sup>

<sup>1</sup>New Media in Education Laboratory, Università della Svizzera italiana, Lugano, Switzerland

<sup>2</sup>University of Fribourg, Switzerland

## **Abstract**

Community-based research can generate high amounts of data. Data elicitation typically involves settings where what is shared by participants far surpasses what can be represented and stored. A common distinction is made, in this process, between knowledge, information, and data. Knowledge is thought to be alive, embedded in social practices, and produced in collaborative settings. Information is a set of representations of prior episodes of knowledge production (Christie, 2004). In social science research, “data” refers to information gathered to understand phenomena in a certain context (Leech and Onwuegbuzie, 2008). Ideally, for research conducted in community settings to adequately grasp participants’ meanings and understandings, the information gathered should maintain some fragrance of the context in which knowledge was firstly shared. In the process that converts knowledge to the information used for research and design purposes, some of this fragrance is inevitably lost. Additionally, data generation methods are never neutral, and due attention should be given to choosing relevant instruments to genuinely search for surfacing community understandings and meanings.

This panel engages with these issues, focusing on methodologies for community-based research that share a concern for understanding community views and visions. Three data gathering methods are explored, and examples are given of their application within three international research projects in Syria, Mozambique, and South Africa. The comparison and discussion over these cases aims to examine the impact of methodological choices on the outcomes of community-based research, clarifying implications for two complementary, yet distinctive, purposes: 1) generating genuine community meanings and understandings; and 2) informing design of relevant community information systems and communication artefacts.

## **Panel presentations**

### **Ethnography in Community-Centred Design**

*Ammar Halabi*

Among the discourses on developing technology for international development, there has been increasing attention to local context (Heeks, 2002), and to designing ICT while taking “community”, rather than “technology”, as a primary focus (Dodson et al., 2012). To this end, Participatory Design (PD) has been suggested to conduct design in Information and Communication Technologies for Development (ICT4D) projects (Heeks, 2002). PD emphasizes the involvement of different stakeholders in designing technology they are going to use (Dearden and Rizvi, 2008). However, uncritical application of PD methods to new cultures and new social structures risks ignoring what PD promises. Thus, the PD process should be locally adapted as required (Puri et al., 2004).

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This contribution draws on an ethnographic study with a local volunteer community in Syria, and addresses one aspect of the participatory process: defining potential IT design contributions. Although the purpose of the study was to uncover design possibilities, the researchers committed to leaving initial questions open, such that core design issues would emerge upon sufficient acquaintance with the community, and through collaboration with its members.

The research design was derived from this commitment. The inquiry started with an exploratory ethnographic study of the community, which involved participation in discussions and collaborative activities hosted on social media sites appropriated by community members. Data was gathered by recording snapshots of online activity, taking notes, and conducting semi-structured conversations with members. To inform future design, the researchers drew from frameworks developed in qualitative sociology. This helped to guide the ethnographic inquiry and synthesize observations in the form of concepts generative for design.

### **The Use of Photo-Elicitation in the field of ICT4D: Methodological lessons of data generation and analysis**

*Sara Vannini & David Salomão*

Photo-elicitation is an interview technique based on inserting a photo into an interview (Harper, 2002), which can be used to both bring further evidence to research (Rose, 2007), and to grasp possibly hidden meanings otherwise unclear to the researchers (Dodman, 2003; Samuels, 2004). In different fields, scholars already recognized it to achieve results that methods relying only on oral and written data are not able to, by generating different insights, encouraging talks, and empowering local voices (Collier, 1967; Miles and Kaplan, 2005).

This panel will present photo-elicitation applied to the field of ICT4D, where it is still quite unexplored: Local stakeholders of 10 Mozambican Community Multimedia Centers were prompted by researchers' questions to generate photos and interviews. The big amount of data thereof produced led to two levels of analysis: a first one performed at the level of the image, and a second one at the level of the narratives connected to them.

Thus, photo-elicitation contributed to the study of social meanings associated to these development-oriented centres. The aim of the study was twofold: on the one hand, it meant to contribute to research in the field by applying a methodology that could draw from and better understand the context (Heeks, 2002). On the other hand, it intended to produce analyses that are design-oriented and understandable by all the actors involved in the study.

A focus group organized with directors of the venues confirmed the method to be fitting for the intended purposes.

### **Digital storytelling as a rich data generation method. Insights from a South African teacher training context**

*Amalia G. Sabiescu*

Digital storytelling (DST) is a form of creative practice that makes use of digital media for telling or authoring stories. Recent studies experimented with the use of DST as a research method, leveraging its potential to engage participants in an in-depth exploration of their experiences that can eventually lead to the elicitation of rich data sets. Studies indicate that

DST can facilitate generation of data rooted in local perspectives and terminology (Gubrium, 2009), enhance participants' interpretive and expressive capacity (Klaebe and Foth, 2006), and is particularly adequate for supporting research engaging with identity and cultural issues with minority groups (Williams et al., 2003) or people with low literacy and media literacy (Nutt and Schwartz, 2008).

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Differently from DST as creative practice, DST as research method is designed to generate data relevant for research purposes. The core area of investigation becomes therefore the key subject around which participants will craft their stories. Data can be retrieved from the digital stories produced, the process of stories production, and the input provided by participants at each stage (Gubrium, 2009), but also by using digital stories for triggering group discussion and reflection.

This contribution will introduce a study in which DST was employed to explore the formation of attitudes towards technology and education by pre-service teachers in two South African universities. The analysis of this case will be distilled in a series of lessons learnt for the employ of DST as a research method, reverting on: cases when the use of DST is indicated; methodological underpinnings; what counts as data and how data can be analysed; and opportunities for integrating DST with other data generation instruments.

## References

- Christie, M. (2004) Computer Databases and Aboriginal Knowledge. Learning Communities: International Journal of Learning in Social Contexts (1), 4-12.
- Collier, J. (1967). Visual anthropology: photography as a research method. Holt, Rinehart and Winston.
- Dearden, A., & Rizvi, H. (2008). Participatory IT design and participatory development. In Proc. PDC '08. Bloomington, Indiana, USA.
- Dodman, D. R. (2003). Shooting in the city: an autophotographic exploration of the urban environment in Kingston, Jamaica. Area, 35(3), 293–304.
- Dodson, L. L., Sterling, S. R., & Bennett, J. K. (2012). Considering failure. In Proc. ICTD '12. New York, NY, USA.
- Gubrium, A. (2009) Digital Storytelling: An Emergent Method for Health Promotion Research and Practice. Health Promotion Practice, 10(2), 186.
- Harper, D. (2002). Talking about pictures: A case for photo elicitation. Visual Studies, 17(1), 13–26.
- Heeks, R. (2002). Information Systems and Developing Countries: Failure, Success, and Local Improvisations. The Information Society, 18(2), 101–112.
- Klaebe, Helen and Foth, Marcus (2006) Capturing Community Memory with Oral History and New Media: The Sharing Stories Project. In Procs. 3<sup>rd</sup> International Conference of the Community Informatics Research Network (CIRN), Prato, Italy.
- Leech, N. L. and Onwuegbuzie, A., J. (2008) Raw data. Given, L. M. (Ed.), Encyclopaedia of Qualitative Research Methods, Thousand Oaks: Sage, pp. 729.
- Miles, S., & Kaplan, I. (2005). Using images to promote reflection: an action research study in Zambia and Tanzania. Journal of Research in Special Educational Needs, 5(2), 77–83.
- Nutt, M. and Schwartz, G. (2008) The Story Economy: Digital Storytelling in Economic and Community Development. In Procs. Prato CIRN 2008 Community Informatics Conference: ICTs for Social Inclusion: What is the Reality?
- Puri, S. K., Byrne, E., Nhampossa, J. L., & Quraishi, Z. B. (2004). Contextuality of participation in IS design. In Proc. PDC '04. New York, NY, USA.
- Rose, G. (2007). Visual methodologies an introduction to the interpretation of visual materials. Los Angeles; London; New Delhi: Sage Publications.
- Samuels, J. (2004). Breaking the Ethnographer's Frames Reflections on the Use of Photo Elicitation in Understanding Sri Lankan Monastic Culture. American Behavioral Scientist, 47(12), 1528–1550.
- Williams, L., Labonte, R., and O'Brien, M. (2003) Empowering social action through narratives of identity and culture. Health Promotion International, 18(1). Oxford University Press.