

# Journal of Community Informatics Special Issue: Information and Communication Technology in Brazil

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## *Guest Editors*

This special issue of the *Journal do Community Informatics* is about information and communication technology (ICT) in Brazil. The articles selected for this edition comprise an interesting and diversified sample of Brazilian studies and initiatives concerned with the effective contribution of ICT to societal processes in the country. The reader will encounter examples of well-established and large scale experiences, as well as recent and fast growing ones; articles that study large metropolises and others that focus small communities; a diversity of theoretical and methodological approaches (qualitative and quantitative).

The first two articles examine and evaluate concrete experiences aiming at strengthening the democratic processes in Brazilian communities, emphasizing the importance of the interplay between technological mechanisms available in the internet and bottom up community mobilization and organization.

The Digital Participatory Budget (DPB) implemented in the city of Belo Horizonte, a large metropolis with more than 3 million inhabitants is focused in the article by Sampaio, Maia & Marques. Based on Habermas' approach to public communication and deliberation, they propose an analytical model to classify and analyze messages posted in government sites and the interaction that takes place among citizens, moderators and politicians. Their results point to clear advantages provided by the DPB, as well as to the need for improvement of digital tools for the benefit of online democratic public decisions.

Alvear and Thiollent focus the development and analysis of a web portal with information about the community of *Cidade de Deus* (City of God), a "favela" in Rio de Janeiro with 65 thousands inhabitants. Social capita theory and Actor Research methodology are applied to promote the involvement of community-based organizations in the process of Portal building.

The following four articles of this issue describe and evaluate projects that use internet and other ICT resources for digital learning. They observe and discuss actions in a variety of communities, which include: a group of health professionals; children and

teachers of a low-income community, senior citizens with low educational level and telecenter users of a digital inclusion project. These studies also cover different Brazilian regions and states, from the Southeast to the Northeast of the country. Action Research prevails as a method of data collection and analysis, but other methodologies, including a large survey, are also applied. A common idea shared by all these studies, and sustained by evidence presented, is that contextual aspects are a basic ingredient of the digital learning process and a fundamental aspect to be considered to assure user's participation and effective use, as well as project continuity.

A network of virtual collaborative learning in a rural community in the state of São Paulo, in the Brazilian Southeast region, is the topic of Rodrigues and Valente's article. They introduce and evaluate multimedia resources aiming at the promotion of the active role of health agents and other professionals as producers and distributors of content of a family health program. They also discuss the consolidation of the network to guarantee the exchange of ideas between participants. The research process, involving several instruments of data collection and analysis, including virtual meetings, is described in the article.

The digital inclusion of a low-income rural community is also the study object of Akhras' article, but in this case the community is located in Brazilian Northeast. The social and physical contexts, as well the present economic situation of the population, were considered as important elements in the process of digital inclusion. Teaching procedures and options related to the use of ICT resources - as student participation in the design of the learning portal and the use of HTML language – are described.

How to approach digital inclusion of senior citizens with low educational level is the challenge described in Maia and Valente's contribution. In-depth Action Research of a small group of seniors over a three years period shows how previous life experiences were brought to the learning ambience to motivate participants, enhance their self-confidence and stimulate information exchanges and creativity. As the authors poetically suggest, beautiful gardens of new meanings can be promoted with the adequate planting and watering of ICT resources.

Digital inclusion in remote communities in a mountain region of the state of Minas Gerais, where telecenters are operated by a non-profit organization, is considered in a large survey (Prado, Câmara e Figueiredo). The authors propose an explanatory model of digital inclusion that takes into account contextual characteristics of internet accessibility. Results indicate a consistent use of the telecenters, specially for entertainment, and suggest that specific contextual, motivational and demographic factors are important predictors of uses that can promote social change.

Three contributions integrate the "Reports" section of this publication. One of them is a long and well established experience in ICT for education and for the promotion of citizenship. The other two are recent efforts in virtual networks building for the sharing of experiences and mobilization of ideas.

Passarelli's work summarizes a long-term program developed at Escola do Futuro, Universidade de São Paulo – (NAP EF/USP) aiming at the application of ICT technology and the development of virtual networks for the improvement of education

and the promotion of citizenship. Several partnerships have been developed throughout its 21 years of existence, including the State of São Paulo government, different private enterprises and, more recently, international agreements. This project has already counted 2 million registered users.

The creation of an online social network of community libraries – Rede Brasileira de Bibliotecas Comunitárias (RBBC) - is the focus of a recent experience described by Machado, Prado, Silva, Lira & Tadashi. Community libraries are informal and spontaneous initiatives, generally set up in peripheral and low-income communities or neighborhoods, and usually run by people without formal training in Librarianship of Information Science. Through the use of the RBBC portal mechanisms, they are being able to share best practices and information, and contribute to public policies for Brazilian libraries.

The *Cirandas*, an information system developed to promote the Solidarity Economy, is described by Tygel and Alvear, who present the principles that guide this form of economic organization, its growth, how production is structured and supported by Brazilian government, etc. *Cirandas* is considered a Solidarity Economy virtual community and it maintains strong links with the free software community.

Closing this special issue, the editor's "point of view" discusses internet access and use in Brazil, focusing on its evolution towards social inclusiveness and towards the increase of uses that can promote individual and community development. Contrasting aspects of the penetration of the internet in the country are emphasized, considering both previous outstanding initiatives and evidences as well as the results of a longitudinal analysis specially developed for this issue, based on data of the Brazilian Census Bureau Annual Surveys (IBGE/PNAD, 2005; 2008).

Our thanks to this editorial opportunity follow a chronological order. Caroline Haythornthwaite's presence in Rio de Janeiro, as a visiting professor at the Brazilian Institute of Information Science and Technology (IBICT), in 2009, with the enthusiastic support of the Coordinator of the research department of IBICT at that time – Celia Ribeiro Zaher –, was the beginning of a very interesting and fruitful academic experience. She was also invited by one of the editors to visit the State of Rio Grande do Sul, and helped deepened the academic and personal ties between the two of us. It was also Caroline Haythornthwaite who promoted the encounter between us and Michael Gurstein, editor in chief of the Journal of Community Informatics. We are grateful to him for having the idea of this issue on internet and ICT use in Brazil and honored by his invitation to organize this edition. During the editorial process, we could always count on his support and stimulus. His careful review of the English version of the articles was inestimable. His participation in a Seminar on Community Informatics in Rio de Janeiro in 2011 was very successful and helped further diffusion of the interest in the subject.

The vantage point granted by our position as editors of this issue allows us to know that our call for papers was received with great enthusiasm by the Brazilian academic community. We are grateful to the authors responsible for the large number of high quality proposals we have received. Our body of reviewers tirelessly engaged in the three-step double-blind peer review process behind this edition. We thank them for

their careful evaluation of the proposals and final papers and for their constructive approach to the review process.

We are also grateful to Adriana Ballesté and to Sonia Bournier de Souza from IBICT. Adriana helped us with technical advises and efficient collaboration in the final editing process. Sonia, an expert in the Open Journal System (OJS) utilized for this publication, helped us along the way. The fact that this edition involved several rounds – an abstract as a proposal, a first version in Portuguese and a second version in English – has been a reasonable challenge, and their help and advice were indispensable.

Journal of Community Informatics. ISSN: 1712-4441