6. Conclusion



Tulcingo community **eRadio logo** Based on Walter Bender's graphic depiction of eRadio when I first told him my idea, Fall 2003. The eRadio is a 'technomethodological' project that proposes to be an effective aid to increase interaction and reduce alienation among members of a dispersed community. It went through a pilot implementation to test its feasibility and to detect its shortcomings. The implementation of the overall eRadio design was applied to the Tulcingo community living in its two sites: Tulcingo and New York. The two nine-day workshops, one in the town of Tulcingo, Mexico and the other in New York City took place as planned.

The project proved feasible in spite of the detected shortcomings.

The differences between the workshop in Tulcingo and the workshop in New York validate the flexibility and applicability of the project to radically different settings, such as those of a big metropolis in a developed country *versus* those of a small town in a developing country, in spite of similar backgrounds, such as cultural and family ties.

People

Even when the eRadio project targeted dispersed communities, it was coincidental to have encountered the Tulcingo diaspora community, which fulfilled the requirements. The people I contacted were active members within their community, who offered full support and foresaw committed volunteers to cooperate in the project. Willingness, participation, and commitment from communicators, content providers, organizers and the audience were crucial to the success of the implementation. Communicators in Tulcingo and Odilia in New York were fully committed to the project. In Tulcingo, volunteers were many, participation was vast, and cooperation was strong. In New York, eRadio seemed more of a door-to-door awareness raising pitch to get Tulcingan immigrants to volunteer. More communicators were expected in New York, nevertheless, the only one that volunteered proved to be far more than enough, not only because she worked long hours on the project but because of her versatility and multiple projects. In Tulcingo, however, given the limited availability of the communicators, the group workshop time was reduced from 32 to 10 hours. Taking into account that all the people involved had a job, school activities, or other duties, it is commendable that they allocated as much time as they did to the project. Moreover, several of the Tulcingo participants had extra duties due to the annual community festivity and educational fair that were taking place during our workshop.

Produce

All of the communicators learned the radio production process and how to handle the recorders and in Odilia's case, also the VoxPopBox—by listening, observing, and inquiring as well as by doing and practicing. For all the communicators, the Gather stage was the easiest and most natural undertaking as compared to the Produce stage that was the hardest to understand. They all excelled in journalistic and elocution tasks. Once they had made their first piece, communicators understood the radio production concepts, which corroborates the notion of learning by doing.

The audio pieces and the transmitted programs are tangible end products that speak for the overall feasibility of the project, as do comments of all those involved directly and indirectly. Three audio pieces were made in Tulcingo by five communicators. In New York, six pieces were made by one communicator, and six other participants provided the voice and content of four more pieces. All the audio pieces had relevant content, audio broadcast quality, and were enthusiastically welcomed by the audience in both locations. As a result, Tulcingans are greatly interested in having the eRadio fully implemented.

A two-way transmission was achieved, first from Tulcingo to New York and six weeks later the other way round. For both transmissions, the audio pieces first had been posted on the eRadio website, then aired over FM radio in Tulcingo and simultaneously downloaded and played through loudspeakers to an audience at '*Casa Puebla* New York.' In addition, the second transmission was also streamed on Internet.

Tool

All communicators learned and used the digital recorder for gathering, even when it seemed not to be the most intuitive device for field recordings. The digital recorder worked well in both locations, and its most important feature, automatic downloading of all its files once plugged-in to the VoxPopBox, proved most convenient. As for the VoxPopBox, the custom-made computer for audio piece creation and transmission, everyone in Tulcingo was reluctant to operate it, except for one who used it for logging his piece. Perhaps more time and individual sessions would have helped do away with their reluctance. The New York communicator did use it fully to edit five of her six audio pieces.

Specs

In the current status of the VoxPopBox, audio pieces can be produced, broadcast and web-cast, even when the networking feature for automatic publishing has not been fully implemented. However, to make it sustainable or reliable enough to leave it in a remote developing community, further coding/implementations have to be carried out.

eRadio

During the eRadio pilot implementation, the community's diaspora situation showed that even though immigrants still are part of their hometown, now they also have begun to assimilate a new lifestyle and belong to the new location, giving each of these two segments of the community unique characteristics, though also the shared need to stick together.

David's audio piece has triggered decisive transnational collaboration to set up a center for handicapped children in Tulcingo. On August 7, 2004 a group of New York Tulcingans and Columbia University specialists arrived in Tulcingo to carry out the first workshop for parents with handicapped children, bringing resources to the center, and establishing an active and closer relationship with the community. Mr. Lucero, founder of *Casa Puebla* New York,' also went to propose a couple of projects for sustainable development in the community. The group will stay on until August 17, 2004 [Jesus, 2004]. It is important to stress, that this group of New York Tulcingans and most of the key participants of the eRadio project in Tulcingo are always looking for opportunities and ways to empower Tulcingo and Mexico. The eRadio project claims no greater role than that of an aid, a means, the result of a technomethodological approach that can be bettered.

The pilot implementation of the eRadio project revealed shortcomings of the implementation logistics and of the electronic tool. However, throughout this thesis the eRadio project, as a whole, has shown that with further development it can realize Brecht's suggestion of having an apparatus with "two-sided" communication functions, where listeners are not just receivers but also speakers who are suppliers.

6.1 Immediate future steps

The **VoxPopBox** requires further development, as was foreseen, in order for it to be a reliable and sustainable system that could be taken to a remote community for it to easily make use of it. As any other computational system continuous improvement should be pursued.

If the **digital recorder** recommended in Chapter 3 is used, every new acquisition needs to be modified.

Technological understanding

Intensive **training** should be considered for a week for one key person in each location and regular **support** should be available by phone, Internet, or other channels. Support could be provided by more experienced communities in these matters, such as the Tulcingo community, remote parties, or eRadio developers.

Legal issues to be aware of,

- \rightarrow audio recording requires previous authorization by the party that is going to be recorded.
- \rightarrow FM transmission requires permission from the government.
- → **commercial music** transmission in both media (Internet and FM radio) also requires permissions and sometimes payment.

6.1.2 Participatory community

Participants have to see a personal or social benefit when joining the eRadio project. Active participation and commitment are based on the communicators' dedication, availability, capability, personal interests, and social involvement. Participants both as individuals and as part of a community have to voluntarily commit to cooperate on the eRadio project. The eRadio project promotes active learning of a methodology and a specific set of electronic tools, and encourages sharing of experiences and transnational cooperation. Cooperation is about the roles that each participant plays in the project and the interaction among participants.

Since people are the key factor, participants have to get organized, make a commitment and strive for active cooperation on the project. The remote and local participants have to confer to get things going and to agree on, at least, timetables for exchange and transmission. It could be convenient to promote the use of eRadio for different purposes in order to involve more members of the community, for example, having a teacher setting radio production tasks among his or her students and connecting them to a remote school to have interactive transmissions.

6.1.3 Methodology

The design of the methodology has to be flexible, **adaptive** to the community's characteristics, time commitments, learning methods, participation, willingness, and cooperation.

The introduction of a methodology and technology has to be seen by communicators as the means to achieve the ultimate end, which in part depends on their **appropriation** of the means. It is a must for people to appropriate a methodology and the use of electronic tools. Therefore the learning duration and learning methods are important variables.

A process is a set of stages that take one along a path to achieve a final goal. However, how to accomplish each stage and how to move from one stage to the other is a creative process built with the unique style and characteristics of each participant and with the cultural influence of the community.

6.1.4 Logistics

Logistics involve arranging actions and organizing available resources to get a project going. People working on the project have to answer questions such as What, Who, Where, When, How often, and How much. The description of functional roles and responsibilities has to be well defined.

Having a staff team to carry out the workshops would be convenient for support, for division of tasks, and for better assistance to individuals and to small teams.

6.2 Towards generalization

In the Tulcingo pilot implementation, the eRadio project was the dependent key factor and the community was the independent one. The eRadio project could be modified and molded, depending on the circumstances and on the characteristics and availability of participants. However, variables inherent to the volunteer community could not be fully controlled, and probably should not. The characteristics of the Tulcingo community and the eRadio participants were determinant of the positive results obtained from the implementation of the project. Adaptations had to be done during the workshops. However those changes occur on dependent key variables rather than on the independent ones, which is the whole purpose of the adaptive nature of the 'technomethodology' employed, enriching the patterns to be considered in order to generalize eRadio.

The pilot implementation encouraged multi-task communicators but the longer-term implementation will most likely derive into more specialized communicators, as well as more complex networks. Figure 6-1 shows the two-way production and transmission features of the pilot implementation and the n-way of the longer-term implementation, in which every VoxPopBox will be a node from where to produce and web-cast, and from where to receive, listen, and broadcast.



Figure 6-1. Two-way and n-way production and transmission features.

6.3 Model

From the results and given the existence of many dispersed communities, the project has potential in different planes, (1) applicability; (2) replicability; and (3) networking. Those three planes require three features needed to generalize an electronic solution to empower different communities, which are cooperation, generalization, and dissemination.

6.3.1 Cooperation

To adequately integrate the digital environment into a certain community's reality, interdisciplinary work is needed, as well as the cooperation of different entities.

In the described eRadio implementation these stages were well developed. Whenever convenient, eRadio should establish cooperation with radio stations, governmental entities, academic institutions, the business sector, and other communities. In addition, eRadio has to develop the network infrastructure to have all the VoxPopBox nodes connected among them. That means having all the individual and institutional relationships established and the technological infrastructures set to manage full communication and cooperation across the transnational network.

6.3.2 Generalization

From the facts described throughout this document, eRadio can be implemented in communities with different characteristics but shared interests. If implemented for longer-term periods and by communities with different characteristics, patterns may emerge that could be used as models. As a result, eRadio would undergo continuous improvement in its methodology and electronic tools.

6.3.3 Dissemination

"If things are done right, a beneficial ripple effect should be triggered; that is, a community's successful eDevelopment moves should directly or indirectly be of use to other communities. It is expected that the communities with the applied solution will try to share with others their new acquisition by convincing them of the obtained benefits. On the other hand, other communities, noticing the increased development of a community may want the same opportunities. Good concepts and actions can be contagious, in easy, rapid, and far reaching manners." [Gomez-Monroy, 2002].