5. Evaluation and Discussion

I am grateful for the fact **that**,
I being young,
my mother was poor.
Compared to all the millionaires' children,
I considered myself a thousand times richer
in all of what gives existence worth.

…

When I hear **parents** saying they labor
to hand down an inheritance to their children,
I wonder whether they realize that,
that way
they **contribute to asphyxiating**
the adventurous spirit in **their offspring**.
Each dollar they hand down to them
increases their weakness.
The greatest inheritance consists in
giving children the greatest **liberty**
for them to develop on their own.

[Isadora Duncan. *My Life*]

This chapter elaborates on what took place, how it was carried out, and the end results, concerning the pilot implementation of the eRadio project.

Rogoff's three planes of socio-cultural activity will be the framework to test my hypothesis, which is as follows: given an appropriate 'technomethodology,' the use of electronic tools that facilitate participative radio production can be a significant aid to increasing interaction and reduce alienation among members of a dispersed community.

Rogoff suggests that the analysis of socio-cultural activity be carried out on three planes: apprenticeship, guided participation, and participatory appropriation. That is, when studying learning in the context of everyday activity, it is necessary to consider: (1) how learners are apprenticed into practice by more experienced partners; (2) how individual interactions contribute to the evolution of a community; and (3) how both of these lead to individual growth and development [Rogoff, 1995]. Although it is not realistic to expect that from the short pilot implementation we will see significant movement across Rogoff's planes, I will use this framework to illustrate the efficacy of eRadio as shown by (1) and (2), which lead to (3).

5.1 Apprenticeship

For apprenticeship, four learning modes (that are innate abilities) were identified in the eRadio project: keen observation, listening-in [Rogoff, 1995], practice [Papert, 1993a], and inquiry/discovery [Postman and Weingartner, 1969]. Instances of keen observation took place when the communicators learned by watching (imitating/mimicking) someone else operating the electronic tools or exhibiting behaviors and attitudes. Instances of listening-in occurred when communicators were given an explanation of a concept, provided direct or indirect feedback, or shown oral extra-linguistic behaviors, such as, changing voice tones while narrating an event. Practice happened when the communicators operated the recorders, before or during real events—and in Odilia's case, also the VoxPopBox—thus becoming better at applying the knowledge acquired by the previous modes. Inquiry is when questions, curiosity, or uncertainty trigger exploratory behaviors. Instances of inquiry/discovery occurred when communicators were critical about their own work and explored different ways of obtaining better results.

In the eRadio, project different degrees of the four learning modes were identified as dependent on each communicator, assimilation of methodology, and manipulation of electronic tools.

Assimilation of methodology

The assimilation of the methodology depends on each communicator. At the individual level, communicators make a more proactive use of their learning abilities when transmission of knowledge is one to one and guidance is more focused on the communicator's personal interests. In terms of quality and relevance, they not only fulfilled the expectations set forth in the project, but they by far exceeded them, taking into account the limited resources and the inexperience of all of those involved.

The audio pieces are samples of participative generation of content within a community. Communicators made use of discovery and inquiry approaches as they learned how to use the equipment and as they planned and carried out content gathering. The communicators also adopted an ethnomethodological approach by creating the right ambience to get their interlocutors to open up and to provide the relevant content in appropriate ways (e.g. details, tone of voice).

The production of the audio pieces, seen as process and as end product, employed the constructionist approach. Freire's perceptions and prescriptions are also seen in the initial motivation for the project, in carrying it out, and in its ultimate objectives [Freire, 1970].

It was presupposed that the group interaction would propitiate a more dynamic inquiry process among participants, leading to 'practice' of the methodology and of the handling of the tools. In short, the methodology was assimilated and furthered.

Adequate durations for the workshop depend on many factors and on desired results, because amount of exposure and practice in turn affect quality and quantity of results.

Operating the electronic tools

Previous experience using computers seems to be a factor for both fast understanding of the electronic tool methodology and less fear of interacting with the tool. Israel and Odilia, the only communicators who used the VoxPopBox during the workshop, had previous and regular contact with computers. As to the other communicators in Tulcingo, who only used the recorder, they said that the recorder was "not that easy" to use; e.g. having to press the same button twice to start recording.

Most of the communicators had finished high school. One of the participants, Elsa, had only completed the third grade of primary school, but her piece on kermesses was superb.

In New York, for Odilia, observing once and then practicing became her strategy to learn fast during the workshop. She uses computers at school every day and she had taken a media class at her high school. For Odilia, after finishing her first audio piece, the whole methodology and use

of the electronic tools (the Recorder and the VoxPopBox), were well on their way to becoming what Minsky terms a 'learned reaction' [Minsky, 2004].

It was not planned for me to do any of the editing, other than to show them how to use the tools or to explain a concept. However, in Tulcingo, due to their reluctance to use the tool and to lack of time, I decided to operate the VoxPopBox while the communicators told me what to do.

The technology would be better appropriated by the communicators if: (1) the development of the VoxPopBox were finished as planned; (2) more time and hands-on practice were allocated to introduce it to communicators, especially to those without any previous contact with computers; and, (3) they frequently used the electronic tools.

5.2 Guided participation

Guided participation takes place in a longer-term implementation. However, the eRadio project points in that direction.

In Tulcingo, having a group of communicators working at the same time on the eRadio project and fostering cooperation among them help communicators to feel part of the community, to obtain feedback, to share experiences. All of them had a history of involvement in their community's affairs. They were active in educational, cultural, political, social, and religious endeavors of the town. David, Elsa, Mary, and Salomón were taking a journalism seminar, once a week, given by one of the most important newspapers in the country, *La Jornada*, because they were going to start making a newspaper for the community. Armando, David, Hector (the cameraman), and Salomón had been running a cultural and educational closed circuit program for the community every Wednesday, in which they made reportages.

No doubt the communicators' background of activism in community affairs, of participating in a journalism seminar, and of being acquainted with closed circuit TV production facilitated various aspects and stages of the workshop. It also sets them apart from the rest of the community.

It is true that communicators play a key role in the radio production process, but there are many ways to participate and levels of involvement, which together constitute community participation. In Table 5-1 a matrix of **individual involvement** summarizes **community participation**. The fully committed communicators were the ones who are most evaluated throughout the thesis; they appear in the gray area (A). Communicators went through the whole production process, regardless of how acquainted they were with the technological side and with the journalistic side.

Figure 5-1. Tulcingo communicators

The individual interaction among participants was not always direct. However, there were other participants who contributed in different ways to the project. In Tulcingo, the matrix is denser because individual participants played different roles, columns in the table. However, in both groups there are a few people who played multiple roles (Columns 1 – 4), who were key people locally and arranging cooperation between Tulcingo and New York. The Tulcingo, gray area shows that among the active communicators there existed a unified team, who even if they worked individually or in small teams, they always gave and received feedback and cooperated with each other. Interaction was also strong among these active communicators and the others. In contrast, Odilia, on the New York side, worked by herself on the project and never interacted with the other communicators. Finally the roles played by each group differed. While in Tulcingo 'Listeners' was the activity with more participants (Row 5), in New York City it was storytellers and content providers (Row 6).

The columns that have a 'grouped' mark at the bottom represent groups of people, and the column with an 'I' stands for 'institution' or 'location.'

The participants' involvement can be classified in five main areas.

Communicators of audio pieces (C) are those who made the audio pieces and went through the radio production process in a workshop.

Storytellers (S) are the content providers who spoke live during transmission or were recorded.

Assistants (A) are those who assisted communicators or were cooperative listeners who assisted by providing feedback or promoting the program.

Listeners (L) are those who listened to the program.

Organizers (O) are those who aided organizationally, who were in charge of recruiting and organizing people, promoting the project, and arranging times, days and locations.

Technical collaborators (T) are those who set up the equipment, took pictures and video of the workshop, and those who did live Internet radio cooperation.

Providers of locales and human resources (P) are those who facilitated the physical and social infrastructure to have localities, Internet/dial-up connection, and human resources necessary to carry out the project.

Extra roles (E) are various extra ways of supporting the eRadio project. For example, running errands, preparing snacks and meals, and an impressive instance of community participation was Misaela who besides doing her daily job, additionally did her husband's, just to let him participate in the project.

Every communicator played an important role in the project, but Odilia's case is worth singling out. Odilia was always motivated, driven by her desire to better the circumstances of her people. She proved my assumptions and approach for the eRadio project correct. The approach called for user-friendly tools and a simple methodology. The assumptions were that communicators were people who would take advantage of the opportunity to help their community, that they would become empowered to do so through becoming engaged, apprenticeship, and learning by doing. She was also motivated because her pieces were going to be heard in Tulcingo and because the people she had interviewed were going to be listened to over the Internet. She had immigrated with her family almost four years earlier; she thought that the strong and unpleasant impact she had received could be reduced by letting people know about the life of immigrants.

PARTICIPANTS — TULCINGO

ROLES	Elsa	Mary	Salomon	David	Israel	Armando	Hector	Misaela	Areli	Miriam	Nancy	Prof Jose Luis		Fam Flores Perez	Interviewees	Audience	
Publisher	C	C	C	C													
Editor	C	C	C	C	C							A					
Interviewer	C		C	C	C	A											
Conceptualizer / Ideator		C	C	C	C												
Voice off	C		C	C				S	S								
Storyteller / talking			C												S		
Listener	C	C	C	C	C	A	A	A	A	A	A			A		A	5
Advertisement / Closing / Introduction			S			S			S	S	S						
Logistics			O	O					O	O							
Organizer			O														
Promotor	O	O	O	O	O	O			O					O		O	
Set up equipment			T	T	T	T											
Radio Internet																	
Camera man							T										
Provided facilities				P		P		P						P			
Internet / Dial Up				P		P											
Get contacts			P														
Hosted														E			
Did someone else's job								E									
			1	2										grouped			

PARTICIPANTS — NEW YORK

ROLES	Odilia	Jesus	Don Carmelo	Reyna	Reyna's mom	Ernesto	Hilda	Isidro	Enrique	Veronica	Jaime Lucero		Interviewees	Audience	Radio Internet Collaborators		Casa Puebla	
Publisher	C																	
Editor	C																	
Interviewer	C	P																
Conceptualizer / Ideator	C	P																
Voice off	C																	
Storyteller / talking	C		S	S	S	S	S	S					S					6
Listener	C	A	A							A				L				
Advertisement / Closing / Introduction		S																
Logistics		O	O							O								
Organizer		O	O															
Promotor		O	O						O	O								
Set up equipment		T							T									
Radio Internet															T			
Camera man																		
Provided facilities		P	P								P						P	
Internet / Dial Up																	P	
Get contacts		P	P															
Hosted																		
Did someone else's job																		
		3	4										grouped				I	

Table 5-1. Active Participation

5.3 Participatory appropriation

Participatory appropriation like guided participation requires a longer-term implementation to become noticeable. However, for eRadio purposes, short-term individual growth patterns were identified, as well as, potential community development.

Individual growth

Individual growth means becoming a better person. Communicators experienced personal growth. Through the eRadio project, communicators experienced changes and situations such as learning something new, sharing know-how, improving skills, participating in the development of the community. Next, I provide specific examples to illustrate this section.

Self-challenge

An example is Elsa's and Odilia's shyness. Elsa challenged herself to do interviews and to start a project assuming that it was hard for her. She did it, though and she did outstanding interviews. In Odilia's case, she was shy with asking people for an interview, and she was not confident at all about going through the eRadio process by herself. However, she never thought that she was not capable; on the contrary, she worked hard to evolve by herself regarding each of her weaknesses. I accompanied Odilia on her gathering tour and showed her step by step how to edit her first piece.

Self-knowledge achievement while producing radio

After we finished her first piece, Odilia was able to go on—on her own—through the radio production process and to use the electronic tools to make her other five audio pieces. The Tulcingo communicators did not have the opportunity of doing a second audio piece. However, they claim that doing a second one would be easier for them and the more they did, the easier it would be.

Of the radio production process, the 'Gather' stage was the easiest one for them. They preferred the interviewing format as a gathering procedure. They shunned the 'Produce' stage. However, for the Tulcingo communicators, having gone through every step of this process—even if they did not operate the tool themselves—was a considerable achievement, since they made the decisions of what to cut, move, delete or re-record. In contrast, in New York, Odilia eagerly went through this stage with the VoxPopBox. Moreover, once she got the feel of the basic editing dynamics—play, cut, paste, move, re-play, zoom-in, zoom-out, select and re-play—she could skip from one operation to another with increasing automaticity. Since the networking mode of

the system was not fully implemented, we did not get to the 'Publish' stage. The 'Listen' stage is discussed in the next section, and in Chapter 4 details about the communicators going through the radio production process are given.

Learning curve

Practice and editing time became key factors to achieve high quality in the audio pieces. With practice, communicators improved the quality of their recordings, reducing noise and leveling volume. Communicators also became more goal-oriented in their 'gathering'—interviewing and collecting of live sound effects—making the editing process easier and faster and thus reducing editing time. The quality of the content depended more on the way communicators posed the questions, on the way interviewees' expressed themselves, and on the relevance of their responses. Although communicators learned to detect when sound effects were needed for ornamentation purposes (for example, to make the piece sound more vivid), sound effects were mainly used to hide cut-and-paste transitions, to make the sequence sound smooth, and to give emphasis or to clarify something. No relationship was found between the total amount of gathered recordings and the final quality of the pieces. Nevertheless, to make the piece catchy and more artistic, allocating more time to editing time made a difference. There are limits, though, beyond which no amount of editing time, or editing skill, can improve pieces much more. Salomón's piece took up around 14-hours of editing time while the others are in the four to six-hour range. All of them have their unique style, plot and message. However, some are more vivid and have a better sequence, and not because of more editing time.

Odilia's work shows a very clear learning curve in the quality of her recordings and in interviewing strategies. She started by thinking ahead of time on all the stages of the process and how she wanted her audio pieces. From there she asked her interviewees either specific closed questions or she would ask an open question such as "Can you share with us, your most impacting story since you came to the States?"

Community development

Due to the brevity of the workshop, community development is difficult to notice. However communicators' outputs have similarities that could be indicative of potential benefits to the community.

What was observable in the short are the intensity of the audio pieces in terms of socio-cultural relevance and the social reaction to the broadcast and web-cast program. An observable

longer-term indicator is the interest expressed by the community in implementing the project on a permanent basis. Audio pieces can play different 'roles' in community development.

Audio historical archive

The audio pieces are broadcast at least once but they remain on digital files and on the Internet as an oral historical archive. The complete unedited recordings or big chunks of the recordings could be kept as links in the archives.

Photographic, video, and digitalized documents could also complement the audio archives, or *vice versa*.

Social awareness

The audio pieces—targeted to the youth and adults—raised awareness of existing problems and of past experiences and traditions. Communicators used a formal and informative format to raise social, educational and political issues that have to be taken into consideration by the community. For rescuing from oblivion past experiences and traditions, communicators used informal narrative formats in longer and more artistic audio pieces. (More details on the audio pieces are found in Section 4.1.5 for Tulcingo and Section 4.2.5 for New York.)

Generating active producers of content

The eRadio production process awoke the communicators to become active participants in their community, as Freire would call it, educating for social change [Freire, 1970]. They become proactive at identifying common problems and seeking solutions. The eRadio project gave them a medium to voice their concerns and to become transnationally organized and empowered to turn things round to grow and benefit from their diaspora situation.

Impact on the remote audience

For the Tulcingans, listening to a relative that is thousands of miles away, either on FM radio or through the Internet, was moving and impacting. Likewise, the Tulcingan stories made people in New York homesick of their land and culture. According to Castells, oriented content strengthens community identities, and its implications for social movements [Castells, 2004.]

Social impact

Social impact is noticed when an event or project changes regular patterns of lifestyles. The phenomenon of connecting both communities to each other during the transmissions generated a feeling of closeness among relatives, friends, and acquaintances. For the communicators and

content providers having their audio pieces on the air made them feel proud of themselves personally and civically and different from the others.

In Tulcingo, the programs were heard over FM radio. During both transmissions, businesses shops and taxi drivers near the transmission site were tuned in to our frequency and had their volumes turned up. The programs were on the air. During the second transmission, people in town were calling to the house across the street from the transmission site to give feedback about the project or to send greetings to their relatives in New York.

Most of the audience invited more people to listen to the program when they heard it. The audience considered the programs were interesting given that it was the communicators' first attempt at communicating with the *paisanos* (hometowners). Half of the audience surveyed was interested in making their own pieces. [eRadio surveys, 2004]

In New York, for the first transmission, the audience was very excited since "the program was made with them in mind." "Telephones never stopped ringing on Sunday in Casa Puebla, with people asking on what day they could listen to the program." [Relaño, 2004. (My translation)]

Community interest

Community interest is seen because after three months of having piloted the project, people continue asking about the requirements to get the eRadio project fully implemented. They see the relevance of being connected with the remote group and they are willing to commit themselves to working on the project.

Tangible cooperation

Tangible cooperation is in the works. The project for the Multiple Assistance Center for handicapped children, featured in David's audio piece, greatly advanced by the local Tulcingans, is now receiving the much needed decisive support by the New York Tulcingans who: (1) did not know about the project until after they heard about it through the eRadio program; (2) are now using their political leverage at the State of Puebla level; and (3) are going to be making arrangements to send a specialized psychologist from Columbia University to give parents of handicapped children a workshop [Perez, 2004].