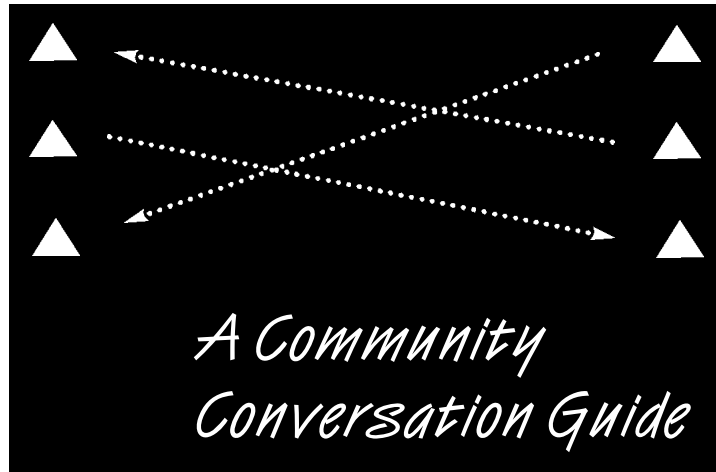


Technology in Your Community



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ACCESS *by Design*

TECHNOLOGY IN SERVICE TO COMMUNITY



This material is based upon work supported by the National Science Foundation under Grant No. 9627091. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

This document was also made possible with support from The Rockefeller Foundation. Opinions expressed herein are the sole responsibility of the authors.

Technology in Your Community was developed by
EDC/Center for Children and Technology

in collaboration with

Innovation Center for Community and Youth Development,

National 4H Council

El Puente, Brooklyn, NY

The Rhode Island Indian Council, Providence, RI

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Introduction

We are in the throes of a revolution. Technology is changing how we do business, talk to each other, participate in government, organize our workplaces and conduct our schooling. It is altering our concepts of time and space.

It feels like the changes are occurring at breakneck speed, and it also feels like we have little control over the direction or impact of these changes on our communities. Many people feel they don't understand technology well enough to make reasonable judgments or decisions. They worry that they won't be able to learn enough to make a difference in how technology is used in their own communities or the larger society. To what degree can community organizations help?

Technology may not be the first concern of a community-based organization. As technology becomes more prevalent, however, agencies are faced with increasingly complex questions about what role technology should play in their work and in their communities. Several areas need to be considered:

- *Can technology be used to help serve the community better?* Some tools that might be useful to an organization are databases for keeping track of membership, Internet access to keep up with the latest developments in the field, or mobile technologies that streetworkers can use to connect people to shelter or emergency services.
- *If technology is to be used, what considerations ensure that it is truly in the agency's and the community's service?* Might there be unintended consequences of using the technology?
- *What is the role of the organization in providing the community with information and knowledge about the new technologies, or actual access to the equipment?* Many people worry about what kinds of computers their children should be using and what they should be doing with them. Others are concerned about learning to use a computer or a new piece of

software that they might need in order to be eligible for a job, as well as where they can go for that education.

- *How can organizations help to inform their communities about the potential impact and protect them from adverse effects of technology?* Can they have a role in dealing with the effects of technologies that have already been introduced? Can they help avoid any negative effects in the future?

Despite the complexities of these questions, you and your community can make informed choices. Start by grounding the discussion in the values and concerns of the community, and get some help from someone with reasonable technological knowledge. In this way, you and your community can start to identify the issues that are important to you and some of the approaches that you can use to learn more and take action.

This guide is meant to help you begin the discussion with “community conversations.” Whether you want to raise awareness in the community and provide a forum for sharing ideas and concerns, or develop a technology plan for your community and/or organization that can then be implemented, this guide will help you get started.

This guide includes

- *Preparing for the conversation.* Pointers for organizing a community conversation about technology.
- *Conducting the conversation.* Strategies for getting the conversation started, keeping it going, and keeping it on track.
- *Following up.* Suggestions for continuing the work begun at the meeting.

Preparing for the Conversation

How you manage this process will depend a great deal on what your goals are and who your community is. Once you have defined these, there are additional questions that can help you structure the process.

You may consider having a series of discussions rather than just one big community conversation. For instance, one organization decided its executive leadership group needed to have the first discussion to get a better sense of their own capacities and beliefs and so they could be more responsible leaders on the subject for their constituents. They then extended the conversations to different staff groups, and then to the community at large, an ethnically diverse, poor and working-class urban neighborhood faced with increasing gentrification.

Identify Your Goals

The first step will be to identify your goals for the conversation. You might seek to:

- Raise awareness about how technology issues affect people in your community
- Get community people thinking about what they might want to get involved in
- Educate different sectors of the community about the issues of technology access and provide a forum for sharing these insights and implications across groups
- Engage the community in a formal planning process, outlining priorities and steps to take, either within your organization or for the community as a whole
- Produce a community development plan that includes technology
- Produce a technology plan based on the issues community members identify.

Decide Who Should Participate in the Conversation

Your list of invitees can include anyone and everyone who may have concerns about technology in the community or could play a role in whatever next steps you decide to take. The size of the group and the diversity of interests represented are up to you. There is something to be said for starting small and focused—you will have an easier time managing the discussion and getting clear about what the major issues are facing that particular group. On the other hand, bringing together people who do not normally talk to each other can be an eye-opener of the best kind, increasing awareness of how the access issues have differential effects on different folks. That in turn will help to frame an action agenda that is potentially more inclusive of the range of needs in your community.

Think about categories of people to include, such as:

- *Community members.* If your goal is to air concerns and raise awareness, you will want to include as broad a range of community members as possible. Think about all the different groups and sectors in your community. Consider inviting people of different ages: young people's perspectives on the world in general and technology in particular can be an important contribution to the discussion; elders have experienced the effects of previous technological changes; and young and middle aged adults are particularly engaged with the effects of technology on jobs and their children's education. Be sure to include people who may not typically be involved in civic affairs and whose voices have not been heard. What might you need to do to facilitate their participation?
- *Community organization representatives and leaders.* These organizations are wrestling with the effects of technology on their constituencies. In some communities, coalitions of community agencies have taken the lead to organize around technology issues and to conduct these discussions. They are potential allies, partners, and co-sponsors. Think beyond the groups that are part of your usual network or service population.
- *Local business owners.* Businesses are often deeply affected by technology in the community, or by their own lack of it. They also may contribute space, money, or other resources to the community's efforts to address technology issues.

- *Church and faith leaders.* In some communities and religions, these leaders are already taking or are willing to play an active role concerning technology, both as part of their responsibility to their congregations and members, and because they are often active in local community and youth development.
- *Representatives of local government.* Municipal leaders have direct responsibility for planning that concerns technology, as well as for engaging the public in reviews and hearings about matters that involve technology and access to technology. For your initial meetings, look especially for those public administrators who are advocates for citizen participation in local decision-making, with the idea that they can be a means for continuing the dialogue beyond the meeting.
- *Local funders.* The well-being of the community is the true focus of these conversations, and the philanthropic sector could potentially offer help, both in support for the meeting and in resources and expertise for follow-up activities. They also need to be informed about the issues, since technology and its uses are not usually, or not yet, a major focus of most funding agencies.

Identify Reasons for Meeting

Why would people in your community come to a conversation about technology? Some aren't worrying about technology at all, while others are concerned about technology in general but aren't quite sure what the issues are. Still others have very particular concerns and interests. Some examples of the issues that might be on people's minds are:

I know my children will need to be able to use computers if they're going to get good jobs when they grow up, but I don't know how to help them be prepared.

They're getting computers at my job, and I don't know if I'll be able to learn the new system. I feel like I have no options.

All my social services are on this electronic card now, and I've had problems getting my food stamps and welfare money.

I got a speeding ticket because of my electronic toll card—they could tell how fast I was going from one toll plaza to the next.

In inviting people to participate in a community conversation, you are offering them an opportunity to share their thoughts and questions and to consider whether and how to begin working together on areas of common concern.

Advertise the Meeting

What would be the best ways to let people know about the meeting? Are there existing forums—community, school, or church meetings, for instance—where you could announce the sessions? Would it be more effective to mail an invitation? Are there key people you would want to telephone or send a personal invitation to?

Tapping into existing networks through leaders from the groups mentioned above may be the most effective recruitment strategy, especially if you want a large group. Ask them to publicize the meeting through their system, and to help in turning out their members. You'll increase the chances of a good turnout if you make strong personal contact with people who are at the hub of larger networks, communicating the urgency of the issue and the importance of the meeting.

Arrange Space and Accommodations

Where should the meeting(s) be held? In what kind of space will people be most comfortable and what's easy to get to? Where will you have enough room to hold the size gathering you're aiming for, and which spaces are accessible to people with disabilities?

Try to think about a place that is either neutral or fully welcoming to all parts of the community. Consider the pros and cons of any location. While the local public school may be available for community gatherings, some people may not be comfortable in such an institutional setting, especially if they feel or have ever felt intimidated by the education system as parents or as schoolchildren themselves. On the other hand, schools are increasingly opening their doors to community activities in the non-school hours, and using these public buildings to support public access to technology may be a positive symbolic as well as practical act.

How can you arrange the space so that people feel at ease and can hear and see each other well? Do you want to set up chairs in a circle, around one large table, or perhaps several small ones? It's probably better not to set up the room "theater style" with rows of chairs, because you want to encourage people to listen and speak to each other.

Make sure the space is accessible not just for people who use wheelchairs or crutches, but also for parents with strollers and others for whom stairs, narrow openings, or inaccessible bathrooms present difficulties. Are the tables high enough for wheelchairs to fit under, and are there unobstructed paths for people to move comfortably and safely?

Think about what other accommodations to provide so that everyone feels welcomed and as if you meant for them to be there. For instance, how many languages will people be speaking, and can you have people available to interpret, including a sign language interpreter? If you are producing a written agenda, can you also make copies available in braille and in the main languages of your community?

See if you can get local businesses or institutions to contribute food, rides, or interpreters, so that the costs to you are minimal and this becomes a real community effort.

Structure the Meeting

Think about how business is usually done in your community. Will you structure this meeting as you usually do? This would be comfortable for people who are accustomed to the usual approach. Or are there reasons why you might want to do things differently—maybe because you want different people involved than usually are, or you want the tone or nature of the conversation to be more relaxed, more inclusive, or more focused?

The process outlined below takes from two to three hours, depending on the number of people involved and how deeply you explore each question. What is the best format for the people who will be participating—one long session or several short ones? During the week or on the weekend? During the day or in the evening?

Ground the Conversation

When the discussion starts and ends with a focus solely on the potential of technology, the ideas that emerge may be thoroughly sensible in the abstract, but often don't really fit the community in practice. So it's useful to place the conversation about technology in the context of the community. Start with:

- What are the values, strengths, and challenges of the community?

Next come the technology questions:

- What technology exists here already, and how useful is it?
- What other tools could be added?
- What would the community be better off without?

And finally:

- What would the community like to do about these issues, and what role can your organization and others play?

Help Everyone to Participate

Begin the meeting by having everyone introduce him or herself, and keep track of who's who so you can address everyone by name. Some people join in on conversations more easily than others. Give people a variety of ways to participate. The technique of having everyone write down ideas and then share them with the group can help draw people into the conversation. You can also put up newsprint pages on easels or on the walls of the meeting room and invite people to jot things down as they occur to them. For people who would prefer to talk rather than write—if writing is inconvenient or the person has low literacy skills—consider stationing a staff person to listen and take down their contributions. Invite people to use whatever language is most comfortable for them; someone else in the audience will likely be able to help translate if you don't already have an interpreter available. At some point in the meeting you'll need to take a look at those jottings and discuss them with the group.

Despite your best efforts, you still may find that some people hang back. They simply may not want to contribute, or they may be shy and prefer not to speak in public. If it seems appropriate and doesn't put anyone on the spot, you can address some questions directly to people who don't naturally volunteer ("We haven't heard from you yet; I'm wondering if you have anything you'd like to add, or are you still mulling this over?").

It is not just individual differences and comfort in speaking publicly that affect participation, however. Especially when you are bringing together people from different backgrounds, be conscious of the rhythm, pace, and "etiquette" of who talks when, for how long, and how quickly after someone else finishes speaking. It is easy for those who talk faster and leave less space

between speakers to dominate the meeting and unintentionally exclude others who are used to a different, slower pace. These styles are often cultural, and you want to be sure that not only are you including every individual, but that you are acknowledging and hearing from all the groups in your community.

If you feel that the balance is off, you may want to take a stronger role in managing the discussion for a while, until the rhythm gets back on track. You can say something like, “I think Joe’s been trying to say something for awhile—let’s hear from him.” If the fast pace of the conversation seems to be favoring one group over another, you may want to comment on it, or deliberately speak slowly and leave space before you cue the discussion to continue.

Make sure that everyone can participate—that there are microphones if the room is large so people can hear each other, a sign language interpreter or amplification devices for people who are hard of hearing. If you use slides, overheads, or other visuals, be sure you narrate what is on them for people who are blind or whose line of vision is obscured by a column or distance. Again, as mentioned before, provide translators and translation for those who are not fluent in the language of the meeting.

Prepare for Specific Technology Questions

These discussions often generate specific questions about technology that the people present can’t answer (e.g., What’s the best software to use for a particular task? What are the different email options and how much do they cost?). These are important questions, but they can bring constructive conversation to a screeching halt. One way to avoid this is to write questions down as they arise and bring them to a technology consultant later. You can ask consultants to attend the latter part of the meeting if there’s enough time, invite them to another meeting, or consult them separately and write down and distribute their answers.

Even if there are people at the meeting who can answer such questions, you may want to save them for later. The technology-specific questions and answers can easily take over the session, and it’s important that the first meeting focus on community needs and concerns.

Prepare Reading Materials

Do you want to distribute reading materials either before or during the session? What materials would be most useful? Will people be comfortable reading? Do you need materials in more than one language, including braille and disk copies for people who use screen readers?

Prepare for Follow-Up

Keeping a record of the meeting will help move your agenda forward. At the very least, you'll want someone to take notes, capturing the main points of the discussion, decisions, and action steps. You may also want to be able to retrieve direct quotes, or pretty close paraphrases; we've found people often make really insightful and powerful comments that you want to remember afterwards. Consider tape recording or even videotaping, but be aware that this may make some people uncomfortable, or result in some people not participating. If you do tape the meeting, ask people first if that's okay, or at least let them know that you are doing it so they can opt out if they prefer. You may want to check with people individually and then decide whether to tape or not, based on the response you get.

You'll need to find someone to take notes and/or transcribe audio tapes. Perhaps you can recruit a journalism or social science student for this task. You will also need to decide whether and how the notes will be shared. Will you write a summary, or distribute the notes? Will these materials be mailed to people, distributed at a future meeting, or made available through some other mechanism?

It's a good idea to circulate a contact sheet during the meeting so that you can keep in touch with people (see the sample contact sheet at the end of this guide). You may also want to distribute a feedback sheet through which people can share their thoughts about the meeting itself (a sample feedback sheet is also included at the end). This will help you understand how successful the meeting was and how to improve future sessions.

Conduct a Practice Run

If you haven't led many meetings of this sort, you may want to do a practice session with a small group of colleagues or community members.

Conducting the Meeting

This section outlines some approaches that might be helpful to you in conducting the meeting.

Materials to Have on Hand

- Newsprint pads, white boards, or blackboards
- Markers or chalk for taking notes and writing individual answers
- Masking tape for putting notes up on the wall or thumb tacks for corkboard
- Large cards or sticky notes and markers for writing individual answers
- Pens or pencils and paper for people to take their own notes, and for filling out contact and feedback sheets
- Any readings you want to share (if you send out readings in advance, have copies available for people who didn't receive them or lost track of them)
- Contact sheets
- Feedback sheets

Introduction to the Group

You will need to structure your introduction for your particular audience and goals. Here are some things you may want to touch on:

- Thank everyone for taking the time to meet
- Introduce yourself and your role
- Ask people to introduce themselves if they don't already know each other
- Give a brief overview of the reasons for the meeting; for example:

“We know that the new technologies are here to stay. The question is, what, if anything, do we want to do about it? What are the things we're worrying about, and can we take action? What are the things we want for ourselves and our community, and how do we get them? How can we ensure that we have access to technology that is useful to us, and how can we protect against or minimize the ill effects of the things that we can't control?”

- Outline the goals of the meeting; for example:

“The goal of this meeting is to raise awareness about how technology issues affect us and to think about whether we want to pursue any of them.”

or:

“The goal of this meeting is to begin the process of developing a technology plan for the community.”

- Give a brief explanation of how the meeting will proceed and what the expected outcome will be; for example:

“It’s important that we talk about technology in terms of our community—who we are and what’s important to us. So the first part of our discussion will be about community values and needs without regard to technology.

“In the first part of the discussion we will make two lists—one of the strengths of our community and one of the challenges we face.

“The next part of the discussion will be specifically about technology. We’ll list what we have, what we need, what we are confused about, what we don’t need.

“When we get to that part of the conversation, please don’t limit your thinking about technology. At its most basic, technology means tools that extend human capacity. Increasingly, these tools are digital—computer-based and electronic—but they include everything from telephones to videocameras, and cash registers to calculators, ATMs, information kiosks, and beepers.

“Finally, we’ll look at how these lists fit together—what’s good about technology in our community, what’s bad, what do we want more of, and what do we need to know more about?

“At the end of the meeting we will decide if we want to pursue any of these issues together and what our next steps should be.”

DISCUSSION

What follows is a process that you can use to structure the conversation. You may want to modify the questions to suit your purposes or substitute other more appropriate ones. Bear in mind that these questions are designed to get people talking first about their needs and interests and those of the community, then to start talking about technology issues, and then to find the connections between these two areas of discussion and consider whether there are next steps to be taken. The idea is to ask people to talk about what they know and go on from there, rather than starting with the big challenging questions.

That said, you know your community best and should feel free to modify the questions, order, and process as you see fit.

PART 1: *Focus on the Community*

Leaving technology aside for a moment, what are three or four major strengths of this community?

Ask each person to write each idea on a separate card, piece of paper, or sticky note. Then ask each person to hand you one idea (the most important, perhaps, or the one that serves the most people) and why he or she chose it. Put each idea up on the wall. Then ask each person for a second idea (the most unique, underutilized, or valued by the community, perhaps) and put those ideas up as well.

Invite people to ask for clarification if they don't understand an idea. After a few rounds of ideas, ask the group if they see any connections or categories emerging, and rearrange the ideas into those groupings. Continue collecting and categorizing ideas until everyone's ideas are on the wall.

Ask the group to look at their categories and share their thoughts. Then ask them if there are things that the community needs but that don't exist. Create a new category and add those ideas.

Next, repeat the process, but ask for three or four major challenges that the community faces.

At El Puente, Hector Calderon posed the question slightly differently: "What do you think we need in this community to make it a healthy, sustainable community?" At the Rhode Island Indian Council, Darrell Waldron asked the group of assembled tribal leaders for "power words" that represented their communities.

PART 2:
*Focus on
Technology*

Setting the community issues aside now, what do you think of when you hear the word “technology”?

Again, ask the group to write down the first three or four things that come to mind and then collect and post their ideas. You may want to ask for the most positive in one round and the most negative in another, the newest, the oldest, the most common, etc. Once you have listed all the ideas and categorized them, ask people if there’s anything missing that ought to be added.

Reviewing the new list, ask people to talk about what they have access to and what they don’t have access to. What do they wish existed that isn’t there? What do they wish didn’t exist?

Darrell Waldron posed this question first, following comments about how the introduction of new technologies have affected native peoples throughout history.

PART 3:
*Making
Connections*

Looking at the two lists you developed in Parts 1 and 2, where are the connections? Given how we’ve thought about technology, what are the ways to fit technology into the community picture we’ve drawn?

You can probe the group with questions like the following:

- Are there services that could/should be provided around technology?
- Are there ways in which technology can support existing services? Is that technology already in the community, or would it have to be obtained somehow?
- Are there technologies that complicate or interfere with important services?
- What would you hope for and what would you be cautious about?

Some groups like to make lists on newsprint, others like stickies that they can move around. The Rhode Island Indian Council did not write as much as El Puente, but relied instead on their oral and storytelling tradition to capture the information.

PART 4: What should we do next?

Next Steps

Ask the group if this discussion suggests any action to them:

- What would you like more information about?
- What should we share with others in the community, and who would that be?
- What would you hope this organization/group takes on?
- What might you like to be involved in?
- What seems important even though it's not clear who needs to do it or how it would get done?

PART 5: Briefly summarize the major points and questions raised in the course of the meeting and ask the group if they agree. Allow a few minutes to discuss and reframe, if necessary.

Wrap Up

Ask the group what they would like to do next. Some possible next steps may be to:

- Continue the conversation
- Learn more about certain issues
- Involve other people in further rounds of discussion
- Develop an action plan around technology.

In each case, ask the group how that step should be accomplished. What are the components of work (e.g., organizing another meeting, inviting new people to the next meeting, researching important questions, etc.) and who will take responsibility for which pieces?

Be sure to circulate and collect contact and feedback sheets before the meeting breaks up.

Follow-up

How you follow up will depend on what the group decides to do. Follow-up activities may include:

- Sending thank-you letters to meeting participants
- Writing up notes from the meeting and sharing them with participants
- Summarizing the feedback forms and sharing that information with participants
- Reminding people about the next steps they've volunteered for and/or about the next meeting
- Sending participants occasional activity updates (especially if the group decides not to meet again, or if not everyone is involved in the next steps).

Feedback Form

Date of meeting _____

1. The structure of the meeting

_____ worked well

_____ didn't work well. It would have been better if:

2. The most useful part of the meeting was:

3. The least useful part of the meeting was:

4. I wish we had talked more about:

5. I wish we had talked less about:

6. The next steps we have planned

_____ are appropriate

_____ are not appropriate. It would be better if:

7. Comments:

Contact Information

Date of meeting _____

Name

Address

Phone number(s)

Fax number

E-mail address

_____ Please share my contact information with other meeting participants.

_____ Please DO NOT share my contact information with other meeting participants.

About Access by Design

In 1996, Education Development Center, Inc./Center for Children and Technology, the American Association for the Advancement of Science, and Campbell-Kibler Associates, Inc., began a research and action project about the equity issues in technology. We conducted interviews with community leaders and organizations in more than 50 places across the country, in small and large cities, in rural areas and Indian reservations, with people from a range of ethnic, language, class, and racial groups. We spoke with people with disabilities and disability rights advocates, representatives from industry, community leaders and activists, youth workers and educators, funders and policymakers. We worked closely with a number of community-based and national organizations to examine the issues related to technology access, including how technology is designed and how well—or poorly—it serves diverse communities. Our partners included the Progressive Baptist Church in New Orleans, the Rhode Island Indian Council, El Puente in Williamsburg, Brooklyn, the Oyotunji African Village in South Carolina, the Accommodation Resource Center at the University of Nebraska–Lincoln, the Young Scientists Club in East Harlem, New York, the Collaborative Visualization (Co-Vis) project of Northwestern University and their afterschool career program at the Kelly High School in Chicago, and the Innovation Center for Community and Youth Development of the National 4-H Council.

The work began much earlier, however, among educators and activists in a variety of settings, including the Center for Children and Technology (CCT), established in 1980 at Bank Street College of Education and now part of Education Development Center. In pursuing how the new computer technologies could best support teaching and learning, researchers at CCT became aware of inequities in access and decisions about design that favored some groups over others, noticing first the gender issues and subsequently race and disability concerns. Yet even by 1996, relatively little attention and few resources were being dedicated to these concerns.

Access by Design was an attempt to gather together educators, activists, policymakers, and industry representatives to build awareness and action for increased equity and diversity in technology.

The products from this effort include materials for community leaders and organizations, as well as a report and action agenda based on the interviews, meetings, and policy efforts conducted from 1996 through the beginning of 2000.