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TECHNOLOGY IN SERVICE TO COMMUNITY



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Working with Technology Consultants:

Suggestions for Community Organizations

As community-based organizations explore their technology needs and goals, they often look to technology consultants for help. Using technology consultants can be very fruitful—or it can be a total disaster. Disasters most often occur when the technology consultants know little about working with organizations like yours and when no one on your staff has the time or interest to learn about the issues and understand the trade-offs. The following tips may help to avert problems:

- 1. Begin by calling other community centers that have gone through a similar review and upgrading of their technology. Find community members and "friends" who have technical expertise who can help demystify what the technology might have to offer. Invest some time learning what you might need to learn about, e.g., identifying the areas that are possible and reasonable points around which to integrate technology; and learning enough about the technology itself and how it works so you can imagine what it might be useful for. You may at this point decide you want a consultant who can help you move from this preliminary phase into serious planning.
- 2. Establish a clear sense of the purposes and functions within your organization or community before you make any decisions about the technology. Identify the needs you have with respect to both administrative and programmatic functions; the roles you want technology to play in such areas as accounting, evaluation, grant-writing, web access, games, personnel record-keeping, computer-based instruction, communications, or informal education of your members; and the numbers of people who will be using the technologies. You also

need to decide whether you want this technology to be in one or several sites, or if you want to start in one site and spread to others in the future. At this stage you don't have to worry about the hardware and software you need. That will be the consultant's job.

- 3. Determine how much money you have available—first to support the consultant's work, and then to purchase and install the equipment and implement the staff training. You may need help in figuring out the latter, but at the outset, you'll want to assess where in your current budget you have flexibility to reallocate funds, and what are the likely prospects for raising funds to support the technology initiative. A consultant should be able to help you identify different scenarios and the costs associated with each.
- **4. Give the consultant a comprehensive introduction to your organization.** Include information about your mission, the populations you serve, and how the organization functions. Do staff tend to work collaboratively or more independently? How important are privacy and security issues? Do program participants have access to the same resources as staff? This type of information will help the consultant suggest approaches that will fit more comfortably into your organization's existing structure.
- 5. Be as clear as you can about what you expect from the consultant. Is it to advise you on what to buy? To help you think through how the technology can respond to the needs you've identified? To set up a working hardware and software system to meet your clearly specified needs? To train people to use the system? To be available for technical support? To provide ongoing maintenance? All of the above? Your answers will have a big impact on the cost of the consultant contract as well as on your overall costs, and they need to be decided in advance. Adding tasks later means you have to add more money.
- 6. Develop, with the consultant, a written contract or detailed letter of understanding describing the tasks, products, timelines, budget, and payment schedule. There are advantages and disadvantages to both "fixed price" and "time and materials" contracts. Usually the best choice is to break the project into a number of milestones with a payment each time a milestone has been satisfactorily reached. Satisfaction should mean that you and your staff have tried it out and it works for you.

- **7.** Make each milestone represent a working product rather than waiting until the end to get the entire system up and running. Each milestone needs to be the completion of something that works. Your first implementation milestone might be the setup and use of a system to track who is using center facilities; this should include the development and implementation of training to use this system. A second milestone might be the development of a system to share information among everyone in the organization. There are many advantages to the milestone method, including getting things you can use almost immediately and eliminating that truly awful situation when two years later you discover the design that looked so good on paper doesn't work in reality.
- 8. Before you decide on a consultant, ask for the names of clients with needs similar to yours for whom the consultant has developed systems. Go and actually try out some of those systems, and while you are there, ask the people about the consultant—were they satisfied with the work? Were deadlines kept? Did the project stay on budget?

9. In selecting consultants remember:

- You are hiring the consultant, so ask questions if there is anything you don't understand, check references, and don't be intimidated.
- Technology consultants have different levels of knowledge, so ask questions until you are comfortable that they know about hardware and applications software as well as about organizations like yours.
- If you and the consultant can't work together, you won't, so get someone with whom you are compatible.

About Access by Design

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m I}$ n 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.