

Community Networking in Mercer County by the Merlink Project

By Chester B. Scholl Jr.

Introduction

I would like to thank Clarion University of Pennsylvania, the Institute for the Development of Information Technology in Rural Communities, and Bell Atlantic-Pennsylvania for the opportunity to participate in this program. The Merlink Project has been in existence for almost three years, and it is rewarding to have the chance to relate the problems, experiences, and lessons we have learned. The board members and volunteers of the Mercer County Free-Net Association have been great in following through on the many responsibilities. Without their assistance none of this would be possible.

The early support of the Shenango Valley Chamber of Commerce strongly influenced the early direction of this project. The assistance and web space provided by Bill and Terry Richards through Infinity Online has been greatly appreciated.

The driving forces in the Merlink Project have been the visionary insights of various board members and their dedicated efforts and many hours spent. The best example of this was a conversation that several of us had on one of our early fund raising trips. We were talking with a successful businessperson in our area and during our meeting with him he asked us twice why we were involved with the project. When we responded that we were doing the project for the sake of the community we felt that he could not understand our motivation. We assured him that the motivation was to fill a need in the community and not for our own gains.

The volunteer basis has had its good points and hardships, but as we proceed we are more aware of the need for a community-based network. This is especially true in those communities that have limited or no source of electronic communications.

In preparing for this program I came to several conclusions very quickly. One, I did not have any special wisdom or answers for this type of presentation. I realized that many talented people have written many good articles on the best way to approach community networking and how to make it work. Additionally, in reviewing much of the past materials from our project I became aware of the mistakes made as well as the good things done. So my goal in this short time is to review what we have accomplished and share some high and low points that our group has encountered along the way.

History of Merlink

Need: The original motivation for this project in Mercer County came about because prior to the fall of 1995 there was only one local connection for CompuServe at a rate of less than 10% of current electronic transfer rates. The public could not access the Internet or other services such as America On Line or Prodigy without making a long distance telephone call to either Youngstown, OH, or Butler, PA.

Steps: During 1994 a number of individuals started meeting to try to resolve this access problem. A group of amateur radio operators initially made up the group. The group enlarged to include people from different aspects of the community, all with an interest in computers. During the summer of 1994 the group started reading about the Free-Net movement, especially since there was the Youngstown Free-Net only a few miles away.

In September of 1994 a decision was made to apply to the National Public Telecomputing Network and attempt to become an affiliate. In October of 1994 the application to form the Mercer County Free-Net Association was sent in to National Public Telecomputing Network.

This route was chosen because it appeared that the association would provide guidance and support for forming a community-based network. The early affiliation with the National Public Telecomputing Network was valuable for the guidance provided, by showing us what steps needed to be taken, and what other groups had been doing.

Based on the early information that the group received, it started to organize its structure and plan to proceed. The group set up basic committees to help divide the work. Immediate challenges were the finances and education of the public to the potential of online services and community networking to provide local access and content. Though the group pursued many sources of financial support, one early success was to approach one of the local Chambers of Commerce.

Early in the process "Merlink" was chosen as the name of the service for Mercer County. The Shenango Valley Chamber of Commerce provided \$2,000.00 to form our legal entity. This included the forming in April of 1995 of a nonprofit corporation known as the Mercer County Free-Net Association and getting the tax exempt status in August of 1995. This helped to add credibility and to apply for grants.

Early in 1995 the group became aware of federal assistance that was being made available as the grants from the Telecommunications and Information Infrastructure Assistance program.

Even though the Mercer County Free-Net Association was not successful in being awarded a grant, the application process was very helpful. The grant application forced the group to clarify its directions and goals and to create a financial plan to start a Free-Net system.

Writing this grant application clarified the following directions and goals:

1. The Merlink Project , by the Mercer County Free-Net Association, an official organizing committee of the National Public Telecomputing Network, sought to establish a cooperative, community-based computer information network to meet the needs of a critically underserved population.
2. It is critical to the social and economic growth of the communities in Mercer County that citizens can easily access information and services.
3. The Mercer County Free-Net Association recognized that all citizens of Mercer County should benefit from the electronic access to the world.
4. The grant application was used as a way to educate and enlist the support of many segments of the community, including county government, schools and libraries, business and economic development, and health and human services.
5. The Mercer County Free-Net Association recognized very early the need to educate the public on the benefits of electronic communications and how to get to the point of it being available to all.
6. It drafted a three-year budget that showed the needs for creating a model including sustaining funds.

Much was gained from the grant writing process although the monetary results were not successful.

The group created a committee structure consisting of the following committees that are still our basic committees today:

Free-Net System
Ways and Means
Publicity
Health and Human Services
Education
Business and Industry
Law and Government
Volunteers

Hardware Issues: By this time they created a hardware list that was based on Sun equipment and the necessary support for twenty-five telephone lines. This was at the time that text-based systems were still common and the **World Wide Web** was starting to become popular. The estimated budget for hardware was in the fifty to seventy thousand dollar range. As 1995 continued, the group kept hoping for the grant, and continued its efforts to educate the public and to attempt to raise the money to set up an Internet Service Provider.

Changes: In the last quarter of 1995 several events occurred which determined the direction of the project into 1996.

1. The Mercer County Free-Net Association did not receive the grant from the Telecommunications and Information Infrastructure Assistance program.
2. The first of five local providers started offering Internet service in the fall of 1995 and the second provider started in April of 1996.
3. They did not raise significant amounts of money toward the project.
4. They decided that even a low budget plan was not the ultimate answer.

As a result, the Mercer County Free-Net Association approached 1996 with a different direction for the Merlink Project. They moved the goal of fund raising to the background, and the focus became providing local information about Mercer County.

Creating: The board of directors did not make the decision to change direction easily. Many volunteers had hoped that the low-cost access to the Internet would become a reality. The board of directors raised the concern that if the Mercer County Free-Net Association concentrated on trying to raise money that it might lose sight of the good that would come from providing local information. As a result several things occurred. By the time they had made the decision they had put together a rough homepage for a demonstration and were storing it on the personal account of one member. This occurred in the fall of 1995 and was primarily for a fund-raising event that was held in November. The purpose was to show the public the potential for a community-based Internet site. The content was drawn from a partial listing of certain materials and links to the few local businesses that had been referenced on a web site. The plan was to have a visual sample of what the goals were. Many issues had to be addressed once the direction was changed.

1. The registering of a domain name for Merlink occurred early in 1996.

2. Finding a provider to host the domain name was a concern. When representatives approached two of the current local providers, some decisions would clearly not be easy. One underlying theme that entered the decision was what kind of financial arrangement would be made between the Mercer County Free-Net Association and the local provider. In fact, for the first several months an out-of-town server hosted the site at a cost of fifty dollars per month. Part of the reason was that the local provider with whom it had decided to accept an offer of free space had not gotten their equipment set up yet, and the board wanted to get the web page started and get information about Mercer County in place. There were several different economic methods looked into, but they decided to go with the provider that was looking for the least amount of commitment or requests. The Mercer County Free-Net Association is still grateful to Infinity Online, Inc. who has been providing the domain hosting for the Merlink Project since the spring of 1996.
3. The following structure was set up for the development of pages.

Volunteers: A combination of word of mouth, suggestions from others, and town meetings were tried to both raise awareness and to solicit volunteers who could help with many needed tasks.

Gathering the information: The gathering of information was a matter of balancing the information that was already available in print in the community and the information that was available in an electronic format. Initially they tried to procure available sources of county information hoping that it would already be in electronic format to make the creation job easier.

Action plan: The action plan encouraged the different committees to develop an overall list of content in their area, then attempt to create web pages with the information. The next step was to guide the group to expand its information in one small area. Then other members of the group could use this pattern to help others follow a similar path. The plan provided for a combination of planning and small action steps that they could actually integrate in web pages. Due to the dynamic nature of the Internet they thought it necessary not only to make overall plans but to make sure that information was appearing on the site to show progress.

Converting the information: There was no magic to this job. All methods were used from scanning to typing when an original was not available. As time progressed, the quality of the programs that were on the market has been steadily improving, but being a volunteer organization there was not much money to spend on software.

Technical methods: This area was broken down into getting the information converted, designing the pages, and constantly trying to keep the newest

methods employed in the development of the web pages themselves. Getting the local information on line is easy, but you must always realize the long-term commitment to keep the information current. Current software continues to help this situation by making it easier to maintain one source of information for printed material, internal use, and for web pages. Such programs as Microsoft Office and Adobe PhotoShop are just two examples of publishing or word processing programs that can also generate web pages as well as print documents. This will only speed up the process of generating pages for local community pages.

Developing methods for continued education of the public. The Mercer County Free-Net Association is constantly reminded of the need for education. This education is not only in how to get information loaded on the Internet but also in the Internet itself.

How to develop involvement of the community. An early decision by the board of directors was that the real emphasis would be on getting the members of the community to take an active role in providing information. The board realized that a group of volunteers probably cannot keep large amounts of the information up to date. Therefore they continually stress that each business or agency should ultimately be responsible for maintaining its own information. An example occurred at a demonstration given to a local bank while trying to raise our funds. One of the bank employees had been the executive director of the local Chamber of Commerce about a year before. During the presentation, a site was presented that had been created and maintained by a national group of Chambers of Commerce. In the information listed was the name of the local executive director. When they viewed the page for the local chamber, the old information appeared. This made a good example of making sure the information is kept current and the need for local businesses and organizations to develop the ability or to maintain their own information.

Growth of pages. They followed through these questions along with many that had been with the board from the beginning. The result was that the number of pages from the original five or six increased to the current list of about 150 pages of information.

Merlink Today Web pages

Content: Today Merlink consists of approximately 150 pages of community information and links to the outside world that are on a server maintained by Infinity Online in Sharon, PA. The home page of Merlink averages approximately 30 visits a day. We have taken the topics we feel were important to the community and tried to break them down into several categories. The different categories are commerce, education, health and human services,

law and government, local news, organizations, people, tourism, web stuff, what's happening and what's new. These deal with the topics of information in the community. There are others oriented to information such as frequently asked questions, a guest book page, a page for searching the site and a page listing new items. These categories were picked early and have remained consistent with some name changes.

Development: One of the earlier organizational attempts was to provide a structure for our volunteers to develop the information in the various parts of the community. The Board of Directors tried to suggest a consistent approach for all the areas so that the volunteers would have something to follow. Probably the best example of this happening is in the law and government area. Mercer County is made up of approximately 60 cities, boroughs, and townships. The first challenge presented to the committees, and in particular for the government committee, was to try to compile an overall listing of the communities in the county. The next step was to take one community and encourage them to develop their own page in more depth. The Borough of Sharpsville was the first community to develop an expanded source of information. If you look at this page today, you will find that the Borough of Sharpsville has developed a large amount of information. This information includes meeting schedules, forms for applying for permits, and general community information.

The next step was to encourage more communities to develop similar pages and to try to increase the information available for those communities that did not create their own web page. So far, in Mercer County, Sharpsville is the only community that has created a web site. At least two other communities are actively pursuing web pages to provide community information. To further enhance the overall content the government committee did secure statistical information from the local regional planning office about most of the communities in Mercer County and, through their committee, has now created pages containing that statistical information for most of the communities in Mercer County.

The tourism area has developed along a different path. At first, general tourist information was collected into a list. The Mercer County Convention and Visitors Bureau maintains tourism information and publishes on a regular basis a multicolor brochure where its members may advertise. After discussion with their Board of Directors, volunteers took themes from the tourism brochure to create a main page for tourism and multiple pages providing names, telephone numbers, general information, and links to tourism sites in Mercer County.

The health and human service area was another area that had information in the early stages. It is one of the broadest areas in the county to collect information from or to provide links to all the services. There are both public organizations and private businesses that are providing health and human service information, including three hospitals in Mercer County. Horizon Health

System has developed an extensive site, including a listing of doctors and services provided. The other two hospitals in our county have started to develop pages but not to the same extent. By working with material that already existed volunteers converted the information quickly.

The Mercer County Juvenile Advisory Council has compiled a list of human service resources in Mercer County. Since the information was in WordPerfect format, volunteers could convert it to web pages. Not including names but using positions and telephone numbers which would not change on a regular basis, prevented it from becoming quickly outdated.

This type of thinking holds true for web pages also, because it decreases the need to change them over time. This information was included on Merlink and sorted both in an alphabetical and a categorical list. The original directory was broken into different categories and those same categories were maintained to provide some organization to that information. They include links whenever possible to organizations' own web pages.

Another small area that has collected relatively complete information is the legal area. Many counties in Pennsylvania have local court rules. Mercer County had not published them for several years and there was no move to republish them to include recent changes. These local rules are useful to members of the local bar association and are needed by attorneys from other counties because the court rules are unique to Mercer County.

These rules are organized with an index to allow users to find a particular rule. Unfortunately this information was not provided electronically but had to be scanned and checked for accuracy. This information was not developed by a committee but through the efforts of a local attorney. Due to the support and knowledge of two of our local common pleas judges, not only do we have the local court rules but we have schedules from two of the county courtrooms and unpublished opinions from one judge.

Two volunteers have provided listings of schedules and movies at the local movie theaters and reviews of current movies. Another volunteer has maintained a list of local golf course information. The whole purpose of encouraging this activity is so that the overall organization can stress the concept of linking to other pages rather than using its resources to maintain the information.

One of the more popular sites is the white page on which volunteers have been compiling a list of people who have visited the site and who have shown an interest in being on our white pages. At this time the page only includes the individual's E-mail name, E-mail address and web address, but we are planning to increase the amount of the informa-

tion that we provide. So far we have only listed them in alphabetical order.

The education area is another area that has seen much development. The education committee has broken its areas of information into activity centers, colleges, guidance links, learning links, learning support libraries and Mercer County schools. The activity centers include non-traditional educational areas that provide community services and educational opportunities throughout the county. Mercer County has three local colleges and there are several within the adjacent counties. The education committee has created a guidance link with links outside Mercer County that are useful for guidance counselors within the county. The learning links area, again, is a list of links outside the county of an educational nature. The learning support category includes a listing of literacy councils throughout Mercer County and other educational centers outside the schools. The library list includes all the libraries, both public and private, available to the public in Mercer County. The Mercer County schools page includes a listing, telephone number, and web mail addresses for all the primary and secondary schools in Mercer County. Volunteers wrote a frequently asked question area to provide questions to many frequently asked topics. Due to the nature of our initial publicity and then changed direction, the most frequently asked question was when Merlink was going to provide local access to the Internet. Unfortunately, the answer has been that, currently, this is not on our agenda.

Moving to other groups: Because the Board of Directors realize that a volunteer organization cannot even come close to maintaining many pages of information it is encouraging individuals or organizations to maintain particular lists of county information. For example, at one point we had started to maintain a list of churches in Mercer County, but then a publisher of a local religious newspaper took that project on and has maintained a complete list of religious organizations in the county.

Special events: One thing that the Merlink Project has tried to do in the past year of existence to create community interest is to include having a remote camera during a local parade. The camera was set up at two points, one along the parade route and pictures were uploaded continuously to the web site. After the parade, many of these pictures were made available as images. Later in the same day, a portable camera, computer, and cellular telephone were used to take additional pictures from the community day that followed the parade. This event attracts 20,000 to 30,000 people every year to Mercer County. In spite of some technical problems the potential does exist, and plans are being made to do similar activities this summer and for different events.

Last fall's primary election saw the county results posted by midnight of the same day. It is our understanding that the local newspaper will cover the upcoming elections more extensively on their web.

Construction and maintenance: The Merlink Project is organized with a main page and a downward pyramid with the second level pages remaining relatively consistent so that they are easier to navigate. At the bottom of every sec-

ond level page, there is a link to all the other second level pages. The menu bar of links is consistent throughout all the second level pages and will even appear on pages further down into the site.

Useful techniques include trying to use only a particular brand of web page editor so there is some consistency on the actual HTML coding for all of our pages. This is important, because there are multiple volunteers working on parts of the entire project. Counters are included on most of the pages to help gauge how much activity the individual pages get.

Because the technical committee was not able to get sophisticated mail forwarding from the Internet provider, we created a talk back page that breaks requests down into certain areas that can then be channeled to the E-mail of different people who have volunteered to work on a particular area of responses. For example, one volunteer has maintained the white, yellow, and blue pages. Other volunteers maintain a community calendar and a link goes to that person. This has been very helpful in organizing and distributing the requests that are received so that people can get responses more quickly than they did initially.

Community involvement

Training: Much of the current activity by Mercer County Free-Net Association is devoted to education or training. From the beginning the board has tried to encourage its own board members and volunteers to become more literate in the use of E-mail and creating and maintaining web pages. The reason for this is so that all of the board members will have a better understanding of the steps and the techniques for designing and maintaining web pages, and pass on their knowledge to new volunteers.

Presentations: Volunteers also make presentations to local businesses or any group in the community that would like a demonstration of the Mercer County Free-Net Association's Merlink Project and the Internet. Other activities started this past winter are community meetings in one of the local public libraries. Here the topics can be anywhere from a general introduction to the Internet to more specific topics such as investing over the Internet, parental controls and other topics that will be useful to the community. Although the local libraries were part of a trial program through a local college, there is still a need for the librarians and their staff to become more comfortable with demonstrating and using the World Wide Web to be able to help the public.

HTML Cafe: During the past two winters, one of our board members has opened the computer lab in his school to a monthly meeting for people who enjoy sitting and discussing HTML and the maintaining of web pages. This HTML Cafe has been very successful and has provided a gathering place for web authors to learn the techniques and solve HTML problems.

Local groups: Other accomplishments within the county geared to get-

ting organizations involved in the Internet include: two out of the four local chambers of commerce currently have some information on the web; there are pages for all of the local United Way Chapters, and several other nonprofit groups have created their own web pages.

What Has Been Learned

Further discussion of the Merlink Project would not be complete without some reference to what the volunteers have done correctly and what they have learned over the year and a half that they have been providing local content of Mercer County on the Internet.

Good

A strong point is that the Mercer County Free-Net Association feels that since it is the only nonprofit provider of information in Mercer County, there is a unique position that it can take without worrying about commercial interest or advertisers. One area is being able to provide some to the other commercial sites in Mercer County that are providing local content. Continually, new information crops up that should be linked to, so that people can learn about the available information about Mercer County. Since the beginning the Mercer County Free-Net Association has worked closely with the local newspaper, and they have provided many articles in support of our overall goals.

As previously mentioned, volunteers have provided local content that was not available in electronic form. Through the work of many volunteers, the number of business and nonprofit groups in Mercer County that have web sites has increased, all providing local information. It appears that our white pages are very useful, and there is mounting traffic on those pages.

Very clearly the project has raised the awareness of the Internet in Mercer County, and along with community events occurring simultaneously, have helped bring the Internet and the World Wide Web in Mercer County both to individuals and to businesses.

Generally, the board is satisfied with what the Merlink Project has accomplished by the volunteers who pitched in and helped along the way, but realize that with more volunteers more could be done. Remember that the budget for all of this is minimal. The only monies spent include money for some software and advertising expenses.

Areas for Improvement

Just as the Mercer County Free-Net Association has done things positively with the Merlink Project, there are certain areas still lacking. One ongoing area is the lack of people to help create and maintain information about Mercer County. Volunteers have been recruited and programs have been set up

to maintain their interest in helping with Mercer County. Though the board has implemented this, there are times that volunteers are not used to the fullest potential and it is an ongoing struggle to get people interested and maintain their interest over time.

The issue of a paid staff member is brought into the board meetings on a regular basis. If a staff member were in place, there are additional projects and support that could occur. An incredible amount of time and energy needs to be put into securing information, developing web pages and maintaining those pages and that time has to be borne by either many people spending a few hours or fewer people spending more hours. As with all volunteer organizations, it is very hard to find those people who are willing to put that kind of time into any project.

Not having our own server and telephone lines is sometimes very frustrating to the technical committee. As things change, there are always new features such as search engines, real audio, and certain mail functions that could be added but are held back because the web space provider is also following a learning curve to continually improve its own service.

The Future of Merlink in Mercer County

The two primary purposes of the Merlink Project are to maintain the current information base and encourage, either through direct development or through other organizations developing on their own, additional information concerning Mercer County, its resources, and its people.

The board will implement new technical features constantly as the technology of the World Wide Web moves forward. The Mercer County Free-Net Association will attempt to do everything it can to keep up with that pace. Some technical areas most in demand are search engines to allow people to search not only Merlink but other sites to find local information. There is an interest in real audio or video information from community and school events throughout the county. Hopefully, as time goes by, local schools will provide some of this information themselves, spreading the burden of maintaining and providing local information over a wider range of sources.

As the other local providers continue to include information concerning Mercer County, the Merlink Project will continue being a central point for Mercer County information so that people will not have to look at three or four different sites to find Mercer County information.

The Mercer County Free-Net Association cannot stress enough the importance of education, and it appears that, as time goes on, the volunteers will do even more in the educational area than in the past. This training can occur in the whole realm of topics from "What is the World Wide Web about?," to "How to Hook Your Computer Up to the Internet," to "How Does One Go

about Developing Their Own Home Page?,” and “How Does One Go about Developing a Commercial Web Page?”

The goal of everyone on the Internet is finding and retrieving information as easily as possible, and in keeping with the overall mission, the easier it is for people to find information about Mercer County, the farther the Mercer County Free-Net Association has moved along the path of accomplishing its goals.

The board sees a continuing need to provide a grass-roots effort for community networking within a county that is taking its first steps on the electronic highway that the Internet provides.

This paper was presented at the conference Redefining the Rural Community: An Electronic Gateway, April 25, 1997. The conference was sponsored by the Institute for the Development of Information in Technology in Rural Communities, Clarion University of Pennsylvania. Mr. Scholl is an assistant of the Merlink Project.