

**U.S. DEPARTMENT OF COMMERCE
National Telecommunications & Information Administration**

Evaluation of the
Telecommunications and Information Infrastructure Assistance Program

Case Study Report

**Greater New Orleans Free-Net
95135**

New Orleans, Louisiana

Site Visitor: Kyle Snow

Dates of Visit: May 13-14, 1999

PREFACE

The following case study report is being issued as part of TIIAP's ongoing evaluation initiatives designed to learn about the effects of TIIAP funded projects. This report is one in a series of twelve based on in-depth case studies conducted in 1999 to study three subjects: (1) issues particular to rural communities (2) issues particular to urban communities, and (3) challenges in sustaining information technology-based projects. The case study reports give us evidence about the special challenges that each project faced and provide information for a better understanding of factors that can facilitate the success of such projects.

In addition to being urban or rural, the case study projects were selected because they involved distressed communities, represented innovative models for services, and affected measurable community outcomes. The case studies, conducted under contract by Westat, an independent research firm, consisted of extensive review of project files and records, interviews with project staff, representatives of partner organizations, and project end users. In addition to the 12 individual reports, a summary of findings across the projects is also available on the NTIA website.

NTIA wishes to thank the case study participants for their time and their willingness to share not only successes but also difficulties. Most of all, we applaud your pioneering efforts to bring the benefits of advanced telecommunications and information technologies to communities in need. We are excited about the case studies and the lessons they contain. We believe that these projects provide a unique insight into the variety of ways to eliminate "the digital divide" which exists in our nation. It is through the dissemination of these lessons that we can extend the dividends of TIIAP funded projects nationwide.

We hope you find this case study report valuable. You may obtain other case study reports, a summary of findings of the collected case studies, and other TIIAP publications through the NTIA website (www.ntia.doc.gov) or by calling the TIIAP office at (202) 482-2048. We also are interested in your feedback. If you have comments on this, or other reports, or suggestions on how TIIAP can better provide information on the results and lesson of its grants, please contact Francine E. Jefferson, Ph.D., at (202) 482-2048 or by email at fjefferson@ntia.doc.gov.

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Project Name	Greater New Orleans Free-Net
City/State	New Orleans, LA
Grant Recipient	University of New Orleans
OEAM Number	95135
Application Area	Education, Culture, and Lifelong Learning
TIIP Grant Amount	\$368,827
Match Amount	\$412,970
Date of Site Visit	May 13-14, 1999
Site Visitor	Kyle Snow
Abstract	<p>The Greater New Orleans Free-Net (GNOFN) is a free, public access computer network linking educational institutions, businesses, and nonprofit organizations. Initially developed through the University of New Orleans Business/Higher Education Council, GNOFN is now an independent nonprofit organization governed by a Board of Directors drawn from community education and business leaders. GNOFN allows its users access to a range of Internet tools and training opportunities, as well as access to e-mail and other electronic services.</p> <p>Users of GNOFN may establish free, text-based Internet accounts with e-mail access. Computers located in area schools and businesses, as well as the public library, allow users to dial in to the Free-Net 24 hours per day. Technical support is also provided via a help desk accessible through e-mail or telephone. Additionally, training sessions are held in a number of locations. The GNOFN has produced a CD-ROM designed to instruct teachers on how to use the Internet in their classes.</p> <p>The GNOFN has continued to function with funding provided by local businesses and nonprofit organizations. The GNOFN also has developed strategies for corporate underwriting of web spaces to provide additional funding streams.</p>

A. Background

Community Characteristics

The Greater New Orleans Free-Net (GNOFN) was established to serve the nine parishes with 1.37 million people (33 percent of Louisiana's population) that compose the New Orleans metropolitan area. These parishes range from inner city/urban to extremely rural areas. Although they vary in racial composition and population density, the parishes all share similar economic, social, and educational problems. These are compounded by limited access to computing and telecommunications, high crime and unemployment rates, and one of the lowest per-pupil expenditures in the country. For example, at the time the grant was prepared, the student to computer ratio in the state of Louisiana was 88 to 1. As of the site visit in spring 1999, however, the statewide ratio had improved to 30 to 1, primarily through statewide initiatives, but also due to projects funded by various state, federal, and private agencies.

Project Overview

Problems/Disparities the Project Was Originally Designed to Address. The GNOFN was designed to improve access to Internet resources and telecommunications technologies, and provide training opportunities for the use of telecommunications technologies once they are established. Specifically, three goals were stated in the grant application:

- **Make improvements to and create the application of the regional telecommunications infrastructure.** The project was intended to create a network for unifying mainstream institutions as part of a multiple parish community network. This entailed expanding the initial University of New Orleans (UNO)-GNOFN partnership into a model for managing a regional World Wide Website capable of providing free access to the Internet to school children, teachers, minorities, disabled, business, and government users. Additionally, the project wanted to create a regional "advisory, consulting and training service that provides expertise in high-speed networking... and will insure that connectivity is open and seamless."
- **Develop innovative training technologies.** This goal had several components. First, the project intended to design, demonstrate, and deploy multimedia training modules, and a grassroots training system using interactive training technologies as a means of "achieving dramatic reductions in training costs." This included the production of a training CD-ROM. The project also intended to demonstrate how an interactive community network can be used to improve economic development resources and provide workforce education information and career education resources.

- **Establish model funding solutions for sustaining the infrastructure.** The project intended to develop funding streams from the national sale of licenses to multimedia training modules, training programs, and corporate underwriting of the GNOFN.

Technical Approach Utilized During the TIIAP Grant Period. The project was intended to provide free access to the information superhighway, as it existed during the early 1990s.¹ At that time, the provision of free access to text-based Internet services, such as Gopher, was one means of helping the development of technical skills while providing access to community information. By the time the project was funded by TIIAP, graphics-based Internet service (i.e., Mosaic) was becoming more common, so the project developed levels of access. The project provided free access to text-based Internet services (including e-mail) to any member of the community (Access Account). Additionally, for a \$75 fee, a new user could establish a “Membership Account” that provided the same services as an Access Account, as well as two MB of space for a noncommercial website and a user-selected ID (allowing for their accounts to be Joe@gnofn.org rather than mdejn08@gnofn.org). Partners to the project, such as schools and community organizations, paid a yearly fee for graphics-based access as well as e-mail.

The technical approach taken during this project built upon the infrastructure in place during the pilot year of GNOFN operations that had occurred in conjunction with the UNO Business/Higher Education Council (UNO BHEC). The technological heart of the system during the grant period was the SPARC system 20 Model 50, GX 64-bit accelerated 2-D/3-D color graphics workstation with 64 MB RAM, 14 GB hard drive, 21” color monitor, and 8 mm tape backup. This is combined with two Terminal Servers, DEC Model 7000, controlling 16 14.4 modems and 8 28.8 modems on 24 inbound lines. The original system was housed at UNO Computing Center, which allowed direct access to the Southern University Research Association (SURAnet) for high-speed Internet access. Once the project began, GNOFN was housed in an off-campus location. The connection with SURAnet was maintained through a dedicated fractional T1 line. This line connected into the office local area network (LAN) consisting of a network switcher, Cisco Router, and communication server connected on a 10Base-100 network. Together, this system allowed for rapid connection to the Internet through appropriately scaled technology. Midway through the project period, T1 access was changed from UNO to a commercial Internet service provider (ISP) that allowed GNOFN to share bandwidth.

¹ TIIAP funding began in 1995. In 1994 GNOFN had been developed and funded largely by the UNO Business/Higher Education Council (BHEC). Planning for the project had begun during meetings of the UNO BHEC during the previous 2 years.

Changes in the Project Over Time. The GNOFN has changed in many subtle ways since the beginning of TIIAP. Mostly, the changes have been necessitated by the growth the project has experienced. The numbers of end users and community groups with web pages have increased dramatically. The technology has also changed since the GNOFN began. For example, originally conceived as being Mosaic-based, the dominance of Netscape has shifted slightly how the system looks. Likewise, an increased user base has resulted in the addition of more high-speed modems and more computer labs to provide training. The GNOFN is currently working on adding a new, dual 3 dBASE server to accommodate increased usage.

Project Status at the Time of the Site Visit. At the time of the site visit, the project had received a no-cost extension that was just ending (as of February 1999). The project was experiencing a great deal of growth, growth that had been ongoing since the grant period had begun. The GNOFN now has approximately 16,537 registered users, and 357 registered nonprofit organizations. The Free-Net has recently completed development of a training CD-ROM, though it has not been distributed yet. The GNOFN continues to provide training, either in two computer labs located in the same building as Free-Net offices or in one of several remote labs. Most of the training is now done by teachers under contract with GNOFN. The Free-Net is a stand-alone nonprofit organization with a sitting Board of Directors. The total staff of the Free-Net now includes 12 paid positions, 25 contract teachers (providing in-field training workshops), and 8 unpaid interns in conjunction with a Baptist Community Ministries grant.

B. Community Involvement

Characteristics of the Grant Recipient Organization

The grant recipient, the University of New Orleans Business/Higher Education Council, is a partnership between the business community and higher education working together to create a high performance workforce. The Council promotes innovation in community alliances, educational access, workforce training, and technology transfer. Several members of the UNO BHEC Board of Directors also serve on the GNOFN Board of Directors. Both Boards include executives from many of the area's largest employers, as well as senior administrators from UNO. The UNO BHEC typically undertakes initiatives designed to expand the training opportunities for the local workforce by involving both educational institutions and businesses in projects linking the two groups. The UNO BHEC was the group that originally conceived the idea and sponsored a task force to explore the feasibility for the GNOFN. Though still a partner to

GNOFN as a community group, the UNO BHEC does not control the Free-Net, which operates under its own Board of Directors.

Partnerships

Partners During the Grant Period. There were a number of important partnerships during the TIIAP grant period. GNOFN provided accounts and technical support and training for the users in these partner organizations:

- **Parish school systems.** At the beginning of the grant, nine parish school systems paid a flat fee of \$5,000 for graphics-based access to the Free-Net.
- **New Orleans Public Library.** The library was also given graphics-based access to the Free-Net, and served as a point of access for members of the community. The library provided publicly available computers for use by community users of GNOFN.
- **Local ISP.** A local ISP provided GNOFN with access to the Internet as well as office and computer space.

Partners Since the Grant Period. The relationship between GNOFN and its partners have changed since the TIIAP grant, as the financial commitments made by partners, especially in business, have changed. Even while these relationships are changing, new relationships have formed since TIIAP. One of the most important for the continued growth and impact of the Free-Net is the alliance with the Chamber of Commerce. The Chamber pays an annual fee (\$35,000-\$40,000 per year) for a membership to the Free-Net for its 900 business members. This provides the businesses with the same level of services received by nonprofit groups (i.e., one graphical account, free text-based e-mail, technical assistance, and training). The Chamber, also a nonprofit, includes GNOFN Internet access and support as part of its membership package as a means of attracting more local business to the Chamber. The alliance with the Chamber helps to move the Free-Net away from being a community agency network to becoming a community network, including public, nonprofit, and private sector groups all in the same listing.

Business and Industry Relationships. Partially due to its incorporation as a nonprofit organization, the GNOFN has entered into agreements with several vendors that have impacted the Free-Net's success. First, as a nonprofit organization, GNOFN is eligible for discounted site licenses for software from a number of companies, including Microsoft. Additionally, an agreement with Netscape allows GNOFN to install the Netscape browser on its

instructional CD-ROM for use by teachers in adapting their teaching styles to incorporate the World Wide Web.

Community Outreach

Involving Community Stakeholders. From the outset, stakeholders in the community have been intimately involved with the project. The project originated with discussions among the UNO BHEC, a group composed of individuals at UNO involved in community outreach and local businesses. The Board of Directors of GNOFN is made up entirely of community stakeholders, as it has been from the initial TIAP period. The involvement of the UNO BHEC groups led directly to wider community involvement. One school principal in the group was also the managing partner of Compact Six, a loose organization of local school parishes that were among the first schools to partner with the Free-Net.

Although no formal needs assessment was performed, the task force formed by UNO BHEC explored the feasibility of a free-net through several less formal means. For example, the president of the Board and Board members visited a number of community networking sites, including the Cleveland Free-Net, to observe how the networks were established and administered. After their site visits, the UNO BHEC reconvened and, following recommendations from the task force, laid the foundation for the GNOFN. Once established, the GNOFN developed its own Board of Directors to oversee its operation. This oversight is mostly advisory, however, as day-to-day operations of the project fall upon the executive director of GNOFN and several key staff.

Project Outreach. The most effective, and typical, form of project outreach has been word-of-mouth. Project staff who were interviewed all said that once users became aware of the service, they wanted to take advantage of it. Project staff also noted that attracting end users has not been a concern for the project. Outreach has also taken several more formal forms. The local newspaper, the *Times-Picayune*, has run a number of stories about the Free-Net, including a prominent placement in a recent series on technology. The public library (a partner) has also played a leading role in recruiting users by publicizing the service as well as the training provided by either the Free-Net or by the library itself. Outreach to K-12 schools was intensive, through workshop fliers and by announcements at regional meetings and professional associations.

Training. A central tenet of the GNOFN has been that connecting people to the Internet is only one part of the process; training them to use their new connections is the other. As a result, training has played a central role throughout the life of the Free-Net (during TIIAP and since). Throughout the history of GNOFN, the nature of the training has expanded and changed.

During the beginnings of the project, training was provided by GNOFN staff, and was typically a general introduction to the Internet and practical lessons about getting connected and using the system. As the user base grew, in both size and knowledge, the GNOFN developed five levels of training courses. The GNOFN provides a general introduction to computers and the Internet; a course on basic topics, including Internet search and e-mail; an advanced course in Internet search and applications; a course in web page design; and a course specifically for principals and administrators. Training is now provided by both staff and others, particularly teachers hired by the project specifically to provide training. The Education Coordinator for the GNOFN has used course evaluations following each training course to redesign and update the course as needed.

Additionally, there are now two computer labs located at GNOFN for group training, and several partner sites also have computer labs used for training activities. Additionally, the Free-Net has completed the design of CD-ROM instructional software for use by teachers. Though in its initial production and distribution stages, this will be a valuable tool in training teachers.

Besides the formal training offered by Free-Net staff, training has been provided at the public library by staff members of the library. A central feature of the Free-Net is an emergency help desk that responds to telephone and e-mail requests. The help desk is staffed from morning into the evening, as well as over the weekends, providing immediate assistance to users.

Protecting Privacy. From the beginnings of the project, the Board of Directors had in place policies to protect individual privacy, as well as safeguard the system from inappropriate use. All members of the Free-Net must sign an agreement acknowledging their rights and responsibilities. The Free-Net does not monitor content, relying upon users to monitor themselves. Although there are systems in place to protect the Free-Net from unauthorized access, the system was recently violated and, subsequently re-secured. Project staff suggested that this was the work of a disgruntled former staff member, and that a similar, independent incident had recently

occurred at the UNO campus, leading the staff to believe that they were at least as successful at protecting the system as a major university.

C. Evaluation and Dissemination

Evaluation

The original proposal had budgeted \$8,000 for evaluation. The plan presented in the proposal listed 14 project milestones. These milestones combined benchmarks with plans for the collection of evaluative data. No formal evaluation plan was completed for the project. Of the 14 items listed in the plan provided with the proposal, many were not completed during the initial grant period, though many of these were completed subsequent to the ending of the grant extensions.

As shown below, those project milestones that were fully met are marked with double asterisks (**), those partially met are marked with a single asterisk (*).

1. Increase the number of partner schools to 239 (72 percent of all schools in the area) by the end of the grant.*
2. Increase the number of public school student users to 50,000 by the end of the grant.*
3. Achieve a registered user population of 50,000 by the end of the grant.*
4. Increase access to minority and disenfranchised inner city populations as measured by the number of end users registered through the public library or other public access terminals.*
5. Provide access for disabled persons, which will be measured by the number of persons registering for accounts through the UNO Public Service Training and the New Orleans Public Library.*
6. Send an electronic questionnaire to businesses about GNOFN, evaluating business opportunities on the network and benefits of training provided by businesses in conjunction with GNOFN.**
7. Compile demographic information obtained from (optional) sections of the registration form.
8. Complete the design of multimedia training modules on a CD-ROM for teacher and user training and then produce, market, and distribute and license it to the community.*
9. Develop marketing materials for the dissemination and sale of the multimedia package.*

10. Triple the financial commitments from new public and private sector organizations in the area to sustain a budget of \$450,000 per year.**
11. Increase by 160 the number of community and nonprofit organizations making information available by the end of the grant.**
12. Market noncredit training programs through UNO's Metropolitan College.
13. Create a funding strategy of corporate underwriting and recognition on the Free-Net.**
14. Include a timeline for task completion within the TIIAP period in each contract between GNOFN and a partner.

It should be noted that the list of items above was not intended to be a formal evaluation plan. Further, many of the items indicate "increase," though it is not clear what that meant because in some cases baseline data were not presented, nor are plans included to gather them where they do not exist.

The only data gathered by the project are counts of the number of hits to the GNOFN web page and the number of new users (including number of registered users, number of schools, number of nonprofit groups, number of public users, and number of business users). Additionally, each of the training sessions conducted by GNOFN staff (and subsequently all workshops conducted by contracted teachers on behalf of GNOFN) were evaluated by attendees after the completion of the workshop using a basic user satisfaction survey. Currently, the GNOFN is conducting a user survey via the web.

Dissemination

Although GNOFN has been widely covered in local media and some national media, there has been no concerted effort to disseminate information about the project to other potential free-net sites or providers. Presentations were done by the president of the GNOFN Board of Directors and the executive director at national conferences, such as the University Continuing Education Association (UCEA), on developing community networks, and also to the State HUD Neighborhood Network, a neighborhood networking group.

D. Problems Encountered (during and after the TIAP grant period)

Planning/Administrative

Like many nonprofit organizations, GNOFN has had some difficulty in retaining its employees, especially those with technical skills, who are currently in demand and can make a great deal more money working in business and industry. Current staff did not see the turnover as a problem per se, and indeed they have adapted some creative strategies to reduce turnover in the future, e.g., creating joint appointments between GNOFN and partner groups, and pooling money and responsibilities to attract and keep high-quality staff. Project staff also talked about allowing people to develop their own responsibilities and niche within GNOFN as a means of keeping motivated people who have diverse interests and skills. Only in cases where the departing staff member did not leave any documentation or planning timelines were there problems, and even then it was generally minor. The only exception concerned a previous project administrator who had not kept very clear written records that needed to be reconstructed and an outside consultant was hired to help with this problem. It was clear, however, that even this problem impacted the end users very little.

One way the project has dealt with the high cost of trained staff is to partner with Baptist Community Ministries to offer high school students internships at the Free-Net. These students are trained on an offline server in the help desk area to provide technical assistance to users. These interns staff the help desk in the afternoon and evenings, times when there are many calls from users.

Technology

In its original grant application, GNOFN had planned to produce a CD-ROM training tool for teachers to use. This CD was designed to teach the teacher how to use the Internet for instructional purposes. This part of the project was just recently completed (the design is complete though the CDs have not yet been produced). A large part of the delay had to do with the timing of changes in technology. For example, just as one stage of the design was nearing completion, Netscape updated its software. There were also difficulties making the CD compatible with both IBM and Macintosh platforms.

The GNOFN system has had few periods of downtime throughout its existence. The primary technical problems that it has encountered have been minor, and in large part due to the growth of the project. Specifically, due to the number of end users and the services that the GNOFN provides, the system recently received and implemented new IP addresses. This required that some users make changes in their software so that the users could communicate with the correct servers. Problems with users not having the correct IP addresses accounted for many of the recent calls to the help desk.

End Users and Community Support

There has been no problem in recruiting end users or community group partners. Indeed, while the large number of end users and community groups could potentially create problems, few actual problems have surfaced. Most problems have been avoided by the way that the GNOFN is constructed. For example, the way that accounts are established results in a finite number of user IDs (though limited to around 80,000). To prevent this from becoming a problem, all accounts are checked for activity. When an account is inactive for 90 days it is de-activated (though not deleted from the system), thus decreasing the demands on the system. This also results in very accurate counts of active registered users, since inactive accounts are omitted. As the Free-Net has grown in users, the demands on the technical support and training systems have also increased. As discussed above, new staff have been hired or retained as interns to meet the growing need.

All of this growth, does not, however, mean that the project is resting on its laurels. Indeed, the Community Liaison is anxious to expand the number of local association and nonprofit groups on the Free-Net, especially church groups, which play important roles in the culture of New Orleans.

E. Project Outcomes

Identifying specific outcomes for specific groups of users is difficult in this project. The basic mission of the project is to provide access to community information. While this is relatively easily measured through site activity, the impact of this access is more difficult to measure. In short, outcomes arising from increased access were not specifically measured.

Impact on End Users

It is clear that GNOFN has brought Internet access to a great many people in the New Orleans area, but the impact of this access is not documented. There is evidence, however, that end users are coming to rely upon the service. During the few periods that the system was down due to technical difficulties, the help desk received many calls from users who could not access their accounts and needed to. This developing reliance upon Internet access suggests that at least some of those served have become more familiar with and/or dependent upon the GNOFN in their day-to-day lives. Those end users who have attended training workshops have all given positive feedback via user satisfaction surveys.

One group of users affected has been the teachers. Those interviewed noted that having the technology available has enabled them to develop new materials for courses or whole new courses. One teacher said that having access to the Internet changed the way he and his colleagues thought about teaching. Still, not all teachers were using the opportunity, partly because of a lack of training or insufficient interest in using the technology in the classroom. Project staff stated that training teachers to use Internet access in the classroom was becoming one focus of additional training. Over 300 teachers received training under the TIIAP grant.

Impact on Other Beneficiaries

Although GNOFN documents list a number of beneficiaries, many of these are either partners or end users. A general belief held about the GNOFN (and free-nets in general) is that their presence has an impact on the entire community. This belief is difficult to substantiate quantitatively. While one could imagine a number of positive indices of Free-Net impact (e.g., lowered unemployment, more technical jobs being filled locally, increased enrollment in college, etc.), the project is not measuring them.

The largest group of identifiable “other beneficiaries” was students whose teachers were end users (although many students were also end users). One of the implicit goals of the project was to train teachers to use technology (and the Internet) in their teaching, but there has been no assessment of teacher use of technology or student outcomes associated with the use of technology in the classroom.

Impact on Grant Recipient and Project Partners

The director of the city library suggested that the presence of the Free-Net played a role in the library's receipt of a Gates Award, a mechanism through which Microsoft donated computers to community groups and agencies. Indeed, the central branch of the New Orleans Public Library was the site from which the program was announced nationwide.

The principal of Jefferson Elementary School (a partner school) credits the Free-Net and a gift from Shell Oil with her school's Business Week Award for Instructional Innovation. Furthermore, she credits the Free-Net with changing the way teachers in her school teach and the way that students in the school learn.

Nonprofit groups have an increased presence on the Internet as a result of their web pages on the Free-Net. Most of these sites offer information about their own group, as well as links to similar groups and other organizations in the New Orleans area. Most of these sites prominently display a GNOFN banner, with a direct link to the Free-Net.

Replication

The GNOFN was modeled after a number of existing community free-nets, and was the first web-based free-net. It has been used as a model by a number of community free-nets, and worked closely with the executive director of the Greater Houston Free-Net. The executive director of the Houston Free-Net adopted many of the policies and procedures developed by GNOFN for use in the Houston Free-Net, including acceptable use policies, registration processes, and organizational by-laws and structures.

The President of the Board suggested that the Free-Net is possible because of economies of scale. It is possible to have a large number of business and community groups each making fairly small contributions in large communities, but smaller communities may need to rely upon fewer sources of funding, each at a higher level. Thus, smaller communities may not be able to support a free-net.

F. Sustainability and Project Expansion

Strategies Used by the Project to Fund Project Activities Beyond the TIAP Grant Period

Many of the strategies that provide funding to continue the project's activities come from practices established early on the project, though some have changed in subtle ways over time. The first, and most important, strategy is that there is now a fee scale built into the program. Although users can sign up for free text-based Internet access and e-mail through GNOFN, users wanting graphics-based accounts, such as community groups, and partner schools all pay fees for services.² The fees vary based upon the type of user. Partner schools pay a flat fee for unlimited access for their teachers (graphical Internet and e-mail access). Nonprofit organizations also are asked to pay a flat annual fee, though the cost can be waived if needed. Finally, individual users may pay a small fee to have services above and beyond basic access, including the ability to select a user ID and develop their own (2 MB) website. Several times during the visit it became clear that asking a small fee of several hundred players creates a large budget from which to work, even if a large number of users are utilizing the free accounts.

One of the primary goals of the project was to develop mechanisms to ensure funding for the project after the grant period ended. These proposed mechanisms included the implementation of business underwriting on the GNOFN website and increasing the number of community groups paying fees for access. Both of these plans have been implemented, though underwriting is still a small component of the project. Additionally, the project had planned on selling licenses for its CD-ROM. Because the production of the CD-ROM was delayed, this plan has not yet been implemented. With the development of the Louisiana Free-Net (LFN), GNOFN has also gained an additional funding source as the GNOFN provides management services for the LFN under a contract with the state. The experience of developing and managing GNOFN for the years prior to the development of LFN was brokered into the contract for managing the LFN for the state.

² The fees paid by partner schools were used as matching funds for the grant.

Project Expansions

A number of expansions have occurred since the end of the initial grant period. The most important expansion, financially, has been the emerging role of GNOFN in the LFN, a statewide network modeled after the GNOFN. Due primarily to the success of the GNOFN, when a statewide project was funded, GNOFN played a large role in consultations and eventually was contracted as the executive manager of the LFN. This expansion brought money to the GNOFN to continue its work, but also expanded the roles for those working at GNOFN. For example, staff needed to maintain their efforts on the GNOFN while providing technical assistance to the LFN. One immediate impact has been the need for more staff. One impact for the end users is that now there is a state-wide information network to connect to, expanding access to resources beyond the New Orleans region.

Not all efforts to expand the scope of the project were successful, however. For example, when a local bank decided that it was cheaper to replace its non-Y2K-compliant computers than to repair them, it donated the computers to the GNOFN. Staff at GNOFN wrote a proposal to place these donated computers into public housing communities within the area, then connect them to the Free-Net. Previously the project had not supplied equipment to off-site locations. This attempt ran into several problems, and so was never implemented. The problems encountered included the fact that only about 20 of the 100 computers donated were usable for the intended purpose (e.g., some lacked modems or peripherals), and grants that would have funded the costs for upgrading the computers did not receive funding.

G. Lessons Learned and Recommendations for Other Communities

All of those interviewed on site viewed the GNOFN as a success. Indeed the growth it has experienced since TIIAP is testimony to the fact. As such, many of the lessons learned by the site were not learned as the result of problems encountered so much as through successes. In some cases these were factors within the control of the site, and in others they were beyond the site's control. Several of these lessons are discussed below.

A Community-Based Board of Directors Is Important. From the beginning of the project, there has been a Board of Directors drawn from the community that includes business and education leaders. The fact that the Board reflected the intended "community" is a large part of the success of the project. The Board, through existing relationships between members and

others in the community, was able to bring strong community commitment and attract a large number of supporters to the project. The project directors interviewed both pointed to the importance of having a Board which was well-known and respected in the community to act as advocates for the program, especially during the early stages of the project. It was because of a strong Board that this project “hit the ground running.”

The Project Occurred at a Critical Time for Technology. Many of the people interviewed pointed out the convergence of many technological events that contributed greatly to the success of the Free-Net. When the Free-Net had its genesis, the Internet was not well known outside of government and research circles. It was largely text-based (Mosaic, and later Netscape and Internet Explorer, were still a year or two away) and was the cutting-edge communications technology. The UNO BHEC saw a community free-net as a way of capturing the edge of the wave to link community resources together. When the granted project began in October 1997, the Internet was just becoming widespread; the community’s interest was piqued and the GNOFN was poised to provide access to the information superhighway. The growth experienced by GNOFN parallels the growth of the Internet. The GNOFN saw the next step, however, and proposed the need for training in how to effectively use this emerging technology. The GNOFN was at the right place at the right time, practically by design.

The Importance of Community Support—Business, Education, Community Agencies—Was Evident. Since the Free-Net was established, it has become almost tacit that community organizations be connected to it. In a way, to be successful and continue to grow, the Free-Net must be a natural part of the community that raises little attention yet plays a central role. Interviews with a number of staff and people connected with the project suggest just such a phenomenon has occurred. Through a partnership with a local radio station, for example, the Free-Net was able to broadcast live, over the Internet, parts of the recent New Orleans Jazz Festival. Schools routinely incorporate the Free-Net into their thinking. For example, a recent summer project in one of the schools was designed to teach a small group of at-risk children about the Internet and web page design. The instructor connected his students to community organizations that were joining the Free-Net. His students worked with the community agencies to create the agencies’ web pages for posting on the Free-Net. When one part of the community connected with other parts of the community, the Free-Net often seemed to be the conduit. Government support was also evident. For example, one Louisiana State Senator hosted a “chat” with area K-12 schools, answering questions from local students from her Washington, DC, office.

Success Breeds Success. Almost from its beginning, the GNOFN has experienced rapid growth in its user base and partnering organizations. Much of this growth occurred with little money expended on publicity for the project. Although the strong and active Board no doubt contributed to community awareness, it was clear during the site visit that word simply got out about the Free-Net, and people anxiously joined in. The webmaster and help desk coordinator both suggested that it is virtually impossible not to know about the Free-Net if you live in the New Orleans area. A large part of the reason is that the Free-Net has been successful in connecting the public to a community information network, while providing training to all.

The success of the Free-Net has also led to many of the partners' continuing success, especially at winning additional funds or publicity. For example, the existence of the Free-Net in the public library led to the library's receipt of a number of computers. The Free-Net contributed to the success of the Jefferson Elementary School, including its recognition by *Business Week*. Additionally, according to an executive with Shell Oil, his company was not reluctant to contribute money to a project that was having an impact, and even though his company's initial match-period is over, the company continues to provide funding for the project, as well as computers to area schools.

Finally, the success of the GNOFN has made it a viable resource for community groups to partner with or fund special projects through. For example, a local foundation awarded a significant grant to GNOFN based upon its successful track record during the TIIAP grant. GNOFN has also partnered with the local Arts Council to provide technical training and computer labs for a summer program for at-risk students. The perception of the Free-Net in the community is that it is a "can do" organization that can serve many roles in the community.

H. Summary and Conclusions

The Greater New Orleans Free-Net has been very successful. Indeed, since the TIIAP grant was awarded, the GNOFN has continued to grow and expand in many ways. This is especially remarkable because community free-nets are becoming more scarce as Internet access has become more common, and the perceived need for free access has declined. A number of factors have contributed to the success of the GNOFN. These are discussed briefly below.

A Community Can Meet Its Needs When It Recognizes the Needs. The GNOFN had its origins in discussions between members of the UNO BHEC, a partnership between local business and educational institutions. This group quickly identified the need to

improve the skill levels of the local workforce in order to remain competitive within the world-wide economy. This group, especially the businesses in the group, recognized that this need stemmed from long-term neglect of the local educational systems. In their view, improving the local workforce's skills could only be accomplished by increasing the level of training, especially technical training, during the years the population spends in schools. The GNOFN was originally viewed as a means of connecting the members of the community to both local and distant resources available via computer networks. The provision of access, however, was coupled with the provision of training on how to use the new-found access. From the beginning GNOFN has emphasized training. It has worked to develop a CD-ROM training tool for teachers. It has provided teacher and public user training in a range of topics, from basic Internet techniques to advanced HTML and web page design.

Community Free-Net Sustainability Comes From the Community. Although designed and utilized as a free-net, the GNOFN has grown in both size and scope. One implication of this is that it now costs more money to provide the support services for all of its users. The GNOFN has been able to grow financially through a combination of efforts, but mostly through community support. Local agencies, such as the Chamber of Commerce, pay fees for Internet access and space for web pages. Although these fees are minimal, when a large number of agencies pay modest fees, a great deal of revenue is generated to help support the GNOFN. The project has had several other sources of funding. One of these, business underwriting, was planned in the original application. The other source of funding is through a contract to run the Louisiana Free-Net. This contract came directly from GNOFN's demonstrated success with running a local free-net. Now GNOFN is totally self-sustaining.

Success Breeds Success. As mentioned above, the success of the GNOFN has led directly to its role in the Louisiana Free-Net, a project that provides additional funding as well as additional visibility, both in the state and nationwide. Success has also meant that the GNOFN does not need to invest as much energy in recruiting users or promoting its services. In the New Orleans area, it is well known what GNOFN can do. In this way, growth has occurred simply due to the success of GNOFN at meeting its goals of providing access and training to the local community.

The GNOFN Has Embraced Growth. When it started, the GNOFN was one of only a few free-nets in the country. The Internet was just becoming widely known, but text-based access was still quite common. Since then, GNOFN has grown in the number of end users and partner groups it has. The technologies involved in local and wide area networks have changed

considerably, yet GNOfN has maintained a high level of success. The demand for training has increased, both in numbers of interested community members and the types of training requested. Still GNOfN has continued to grow throughout this period of intense change. Partly this is due to timing; more and more people are connecting to the Internet everyday, so an increased number of users is a historic trend, not specific to GNOfN. Partly, however, this is due to the fact that the GNOfN is not a very complex system. Growth to GNOfN does not require wholesale changes in how it functions as an organization. Its basic mission and delivery systems remain the same, though they have grown along with the technology.

