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**Project Narrative**

**I. Project Purpose**

**A. The Problem.** More than 350,000 technical jobs with excellent pay and benefits are open in the U.S. without skilled workers to fill them. Here in rural Appalachian Ohio, unemployment is the highest in the state, partly because area small businesses are unable to profit in the global economy since the workforce has not been trained to use information infrastructure services and technologies. Over 70% of our young people leave the region following high school. The Appalachian Center for Economic Networks (ACENet) and partners will implement the Appalachian Teleworkforce Development Project to demonstrate how a community network can serve as a vehicle for innovative workforce development activities.

What will we see in our community as this project is implemented? Let's pick a typical Thursday evening in the spring of the year 2000. At Alexander High School, ACENet staff and a group of seniors provide technology training to small business owners and their employees using curriculum modules hosted on the Southeastern Ohio Regional Freenet (SEORF). All five high schools in Athens County are humming with activity in the evenings as business owners and other community members access computers and the Internet, using the community technology centers located in the schools. In the daytime students take part in an intensive school-to-work class known as the Computer Opportunities Program (COP). Twenty of the seniors announce that they have received job offers from local businesses for technology-related jobs.

Meanwhile, in Glouster a local producer of gourmet pickled peppers discusses his payroll with an employee who has computerized the firm's financial systems. This employee points out that payroll has doubled in the last year, and that most of the employees now use computerization and the Internet in some aspect of their work. Fifty percent of their orders now come from their web page on SEORF or from purchasers using Electronic Data Interchange (EDI). She, along with the rest of the employees, gained skills as part of the workforce development training program described above, that emphasizes how the NII can be used by small businesses to increase sales, profits, and quality jobs.

**B. The Proposed Solution.** ACENet is a community economic development organization that provides assistance to over one hundred expanding specialty food businesses in Appalachian Ohio. For more information on ACENet, and recent press coverage including an article in the *Wall Street Journal*, please see Attachment A. ACENet will coordinate the Appalachian Teleworkforce Development Project. The purpose of this project is to ensure that existing and potential employees gain the computer information and communication skills needed for specialty food firms to rapidly expand, modernize, and reach global markets. A community partnership among five area high schools, small businesses, and Ohio University will design and implement the workforce development project. The project will provide a model of how a community network, the Southeastern Ohio Regional Freenet (SEORF), and its system of public access points and community technology centers (CTCs) can serve as both conduit and base for the workforce development programming.

The project has three components: school-to-work, community technology centers, and workforce development content and training. ACENet and partners will design and implement an innovative school-to-work Computer Opportunities Program for 75 students in five area high schools. This intensive, year-long, eight hour-per-week program will train students in the many information and communication technology most in demand by the specialty food firms as they expand. These students, as part of their internships, will staff the high school computer

who says seniors? who speaks? how often?

(COP) ✓

what supports EDI?

3 components

(1)

COP student + program → small bus → currie modules for SEORF / OU  
a business training

technology centers and assist in the workforce development training sessions, and thus have many opportunities to meet potential employers who will be utilizing the centers for training.

2) Second, during the two-year project, all five area high schools will set up community technology centers in their school. Along with ACEnet's Food Processing Center, which has a Community Technology Center located in its facility, these high school centers will be open to the public during evenings and weekends and will serve as the physical locations for the Appalachian Teleworkforce Development Project.

3) Third, the Appalachian Teleworkforce Development Project will train workers in small specialty food businesses to gain skills in computer information and communication technologies. These small businesses produce high-value, innovative products such as vegan pasta and sunflower pesto, and have started to sell in national and international markets through marketing programs developed by ACEnet. Project staff will work with small business owners to design modernization plans to ensure that their expansion is successful and they are supplied with skilled workers. Integrating the use of the NII and other new technologies will be a central part of these plans.

SEORF, the community network, will serve as the electronic platform for the project. SEORF will host the curriculum, conferencing and chat space, and supportive media for the project. Examples of the flexible training modules include: how an Intranet can be used to track purchasing or inventory, using EDI, market trend scanning, Internet marketing sites and strategies, uses and design of Web pages, electronic mail correspondence with purchasers and suppliers, online focus groups to gain customer input and feedback, and issues in international Internet commerce. ACEnet will design and coordinate the sessions, and will utilize advanced high school students as assistant trainers. In terms of support, SEORF will provide a Help Wanted Section that will enable students in the COP program and others to identify new technology jobs, and a Work Support Section that will list childcare, counseling, clothing, and transportation options for workers. ACEnet will also coordinate online networking on SEORF among the students, teachers, and businesses involved in the project. This network will enable participants to share information about the project, and thus continually upgrade the quality of the COP program and the programming at the high school community technology centers.

*course  
modules*

**C. The Outcomes.** The goal of this community networking project is to create a replicable model of how an existing community network can be a platform for the development of a skilled workforce in a poor, rural area of Appalachian Ohio. The Southeastern Ohio Regional Freenet, and its network of public access points and community technology centers, will be a vehicle to prepare both existing workers and entry-level workers for the challenges of the 21<sup>st</sup> century. The **outcomes** of this project will include:

- ◆ At least seventy-five low-income high-school students in five high schools will participate in the two-year project which will result in either employment in a technology-related position or going on to higher education in a technology based field.
- ◆ At least one hundred potential or existing workers will participate in the project, which will upgrade their skills, leading to an increase in their job responsibilities and/or wages.
- ◆ At least forty specialty food businesses will report increased sales and new high-quality jobs through participation in the project.
- ◆ Four new computer technology centers will be developed at the high schools.

- ◆ A suite of workforce development resources, curriculum modules, and an online learning network among teachers, students, and specialty food firm workers and owners involved in the project will be developed on SEORF.
- ◆ A model for a community-supported workforce development system which will last beyond the duration of the grant period, uses a community network as its platform, and includes public access, training, content, and support.

## II. Significance

A. **Innovative Aspects.** ACEnet has long been an innovator in using technology to support and amplify economic development efforts. We are one of the *only organizations in the country* that links the community networking movement and the community economic development movement. The project is innovative in that it integrates the benefits of the National Information Infrastructure in a **highly targeted workforce development project**. Because the project focuses on a set of firms in one industry (food processing), the workforce development aspects will be tightly focused on the practices and needs of that industry.

The project is innovative because it is part of a broader modernization process which is essential for small firms in isolated communities to participate in the world economy. The business owners and employees will work out an explicit plan for incorporating new technologies into their business operations. These plans will then be aggregated and used as a basis for planning the workforce development modules. By setting up a dense workforce development site on SEORF, the program will be able to be continually updated with new information and resources, so that workforce development does not end with the conclusion of a particular training session, but becomes integrated into the businesses' daily operations.

Another innovation is the placement of the workforce development sites in the local high schools, which encourages stronger links between area business, the schools, and community. Upgrading of the typical high school computer classes, by having the students learn skills identified as important by area businesses, is an innovation of critical importance to schools throughout the country. In particular, the students will learn to become trainers themselves, which will greatly assist the adoption of new skills and techniques in the firms that hire them.

B. **How the Project Will Serve as a Model.** This project will serve as a model for the over 150 communities served by community networks throughout the nation, for over three-hundred community groups which run community technology centers, and for over 200 groups around the country which focus on the specialty food industry. Many of these are low-income communities, where the community networks, tech centers, or food-based economic development strategies were developed to address issues of inequity in access to new technologies including the Internet. Yet whether the community organization is located in Billings, Montana, or inner city Chicago, few have focused on the issue of workforce development.

The Appalachian Teleworkforce Development Project will result in the development of a set of tools for access, content, training, and support specifically tailored to increase employment in high-tech jobs and opportunities for young people. These tools will be made available through the Association for Community Networking and the Community Technology Centers Network. In addition, the results of the project will be shared with ACEnet's existing network of more than 200 community development organizations working with small food businesses in low-income communities throughout the country. The tools will include a community assessment worksheet that will assist community networks to identify a local economic development partner, such as a

indfined dev. web site

Modules on SEORF??

tools  
 here  
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 CTEC  
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 pay for?

local community college, tribal council, Small Business Development Center, State Extension office, settlement house, or grange.

### III. Project Feasibility

A. **Technical Approach.** SEORF is presently housed on a server purchased with support of the TIIAP program, housed and linked to the Internet at Ohio University. SEORF is administered by a community coalition that includes K-12 educators, ACEnet staff, and representatives of two departments at Ohio University. It currently supports over 6,000 users with free access to electronic mail and community-based information, as well as the opportunity to publish their own information to a worldwide audience, at fourteen public access sites.

Our technical approach is first, to expand community and small business access to the NII by setting up four additional community technology centers in the four high schools which will participate in this project. Each center will include fifteen Pentium-quality PCs, printer, scanner, and project for the teacher. The Centers all have or will have T-1 connections through the Ohio's Schoolnet program. The second area of technical activity focuses on SEORF and its role as a platform for interactive curriculum development and discussion. Project staff will conduct research and identify best models for online workforce development curriculum, and group work software. SEORF currently is running WebCaucus, a state-of-the-art, web-based computer conferencing system. We suspect that this project may be best served by a combination of computer conferencing and chat applications. SEORF is fully **interoperable** with any personal computer equipped with a modem, a phone line connection and communications software, and is open to the World Wide Web. This demonstration project is **scalable** in the sense that ACEnet's ongoing efforts to training existing and entry-level workers in Athens County could be scaled in the surrounding counties and in other low-income communities around the country. Using SEORF and its network of community technology centers takes advantage of existing infrastructure and telecommunications services, while increasing the **technical capacity** of local high schools to serve as centers for workforce development. Ohio University is committed to **maintaining and upgrading** SEORF as part of its community service mission.

B. **Applicant Qualifications.** The Appalachian Center for Economic Networks is a community economic development non-profit located in rural, southeastern Ohio. For the last thirteen years we have worked to create new jobs and business ownership opportunities by linking entrepreneurs and existing businesses with high-value niche markets and developing resources such as training programs and a product development fund. For the last five years community networking has been key to our work. ACEnet currently consists of eighteen dedicated staff members, including two hard-working Americorps VISTA volunteers.

For greater impact, we focus on the 100 specialty food businesses in the region, most of which have started in the last four years. We operate a small business incubator that includes an 8000 square foot licensed processing facility where business owners develop new products and a community technology center that provides training for businesses and community groups. We are also participants in the Public Webmarket, a project of the Center for Civic Networking, an Internet marketing and commerce "virtual business incubator" which features twenty-six Appalachian entrepreneurs.

In response to our community's need for more technical training and assistance for small businesses, ACEnet designed the Computer Opportunities Program (COP) at Federal Hocking High School, where a group of juniors and seniors are taking a year-long class leading either to

employment in or ownership of a computer consulting business. In January ACEnet conducted an evaluation with the students which revealed the significant amount of training students have provided to teachers, other students, and family members. The students found that the class helped them develop time management skills, multi-tasking capacity, and increased self esteem. This highly successful pilot will provide the model for the four high school sites to be developed as part of the Teleworkforce Development Project.

ACEnet's staff team includes Amy Borgstrom, Executive Director, whose participation in the development of the Association for Community Networking and the Community Technology Center Network has enabled her to develop relationships with many community networking practitioners. Amy is also skilled at bringing partners to the table and is an expert meeting facilitator. Heather Snedecker, technology trainer for the COP project, is a skilled teacher and curriculum designer. Tracy Kitts, chief information officer, has 18 years of experience working with computer systems, including the set-up and management of ACEnet's in-house network, has provided training to small firms in most business software applications, is familiar with building systems and configuring hardware. Steve Schnell, telecommunications team manager, has recently conducted interviews with more than 20 food businesses, and his findings form the basis for this project. He manages ACEnet's Community Technology Centers, troubleshoots SEORF problems, updates Web pages, manages accounts, and serves as liaison with Ohio University. Leslie Schaller, Business and Markets Director, has 15 years in the food industry, five in providing assistance to small firms. She provides training to businesses in using the Internet for research. She has long-term relationships with all of the food businesses to be involved in the project. Please see Attachment B for resumes of key staff.

The ~~other~~ partners in this project are Ohio University, the Southeastern Ohio Regional Freenet, Federal Hocking High School, Alexander High School, Athens High School, Trimble Local High School, Nelsonville York High School, the Athens County Department of Human Services, and specialty food firms. Ohio University, co-founder of SEORF, has a long history of commitment to the community and a track record of implementing technology programs. When President Robert Glidden came on in 1995 he lauded SEORF as a key community resource in his first public addresses. ACEnet has collaborated with Ohio University to set up and improve SEORF and has also linked students in their Entrepreneurship Program with food businesses. Tim Myers of the Ohio University Telecommunications Center is currently President of ACEnet's Board. O.U. is submitting another TIIAP proposal in the Education and Lifelong Learning category; we support this project, and include in Attachment D a letter of support from its director.

SEORF is unique among community networks in its focus on community economic development. Through its conferencing system, WebCaucus, SEORF hosts a number of local, regional, and national online collaborations. The five high schools involved in this project range from Trimble Local, with about two hundred students and a single computer lab, to Athens High School, with six hundred students and computer curriculum primarily preparing students for secretarial work. All are just starting to use the Internet. All of the principals are deeply committed to this project, offering space, teachers for the COP program, and travel funds for student interns who work in the computer technology centers. The COP students at Federal Hocking High School are interested in becoming mentors and trainers to students in the four other high schools.

The Athens County Department of Human Services (ACDHS) serves 4,000 welfare recipients. The Director is considered an innovator in the state. ACEnet has collaborated

Can it  
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reduced  
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successfully with the ACDHS on five projects during the last ten years, and is currently working with them on providing support for women as they transition from welfare to work. ACEnet also established a public access point for SEORF at the Department's Adult Basic Literacy lab.

Over one hundred specialty food firms are involved in ACEnet's Food Ventures project. ACEnet recently interviewed firms to discover their needs in computer software applications, information and communications. The results of those surveys convinced us of the need for this project. Two firms, Crumb's Bakery, and Casa Nueva Restaurant, attended the joint design meeting that resulted in this proposal.

**C. Budget, Implementation Schedule and Timeline.** ACEnet requests \$436,500 from the TIIAP to implement this project. \$471,380 will be contributed by project partners, including \$199,100 from ACEnet. The total project budget is \$907,880. Please see Attachment C for Implementation Schedule and Timeline.

**D. Sustainability.** Community based networks such as SEORF have played a key role in ensuring affordable public access to local and regional information. In addition, they provide local citizens with the powerful experience of creating and providing information of interest to them to a global audience. But these systems face increasing pressure in terms of maintaining long-term sustainability. ACEnet is developing a hybrid model for SEORF where business usage can help defray the operational expenses of providing low-cost, public access.

We see this project as a long-term initiative that will become self-sufficient over time. Once the curriculum is tested, portions of the project can be institutionalized in existing educational institutions: the COP programs will become part of the high school curriculum; the workforce development for existing workers will be incorporated into adult education or technical college. These programs would pay fees for the use of the Computer Technology Centers for the workforce development classes. The TIIAP grant will primarily be used to set up necessary initial systems, design the training, implement a model that others in the community can see and thus buy into, and convene the meetings to design the long term, sustainable system.

*See*

*How much does this cost??*

#### **IV. Community Involvement**

**A. Partnerships.** ACEnet has a history of collaboration with all of the partners in this project with the exception of four of the high schools. In the case of the four high schools with which we have less relationship, we are committing staff resources and an online networking forum to ensure these relationships are fostered and maintained through weekly contact, troubleshooting, and assessment. Please see Attachment D for letters of commitment from partners and Attachment E for letters of commitment from other funders. ACEnet will serve as the lead for the project and be responsible for convening partners, coordinating all activities, and ensuring timely completion of project objectives.

Ohio University will continue to support and expand SEORF, which is serving as the technology platform for this project. The benefit that Ohio University receives from this project is excellent public relations in terms of the University's commitment to the low-income community in which it is located. The University will contribute \$120,000 to the project over two years in staff and Internet resources.

SEORF contributes its current technical capacity, staff design of online discussion areas, and building Web pages for the content. The benefit that SEORF receives from this project is additional staff capacity. In addition, we expect that participation in this project will continue to

build SEORF's reputation as a leader in providing a technology platform for innovative community development efforts. This project also enables SEORF to experiment with a new sustainability strategy, by developing products and services including curriculum, online resources, and training models that can be marketed to other community networks. SEORF will contribute \$12,000 in steering committee time to the project.

(SEORF notes &)

confirm

Five local high schools will participate in the Community Opportunities Program. Their role will be to ensure the integration of the COP program into their regular curriculum and teaching staff, and to make sure their boards of education approve and support their computer technology centers role in the community. The benefit they receive is an exciting new opportunity for their students to either own or work in a technology-related field. Some will also receive upgraded computers for the class. They are contributing staff time, existing space and computers, support for student interns in the amount of \$10,000 per year each.

(Meet with SEORF)

The Athens County Department of Human Services will ensure that online materials are appropriate for low-literacy populations. The benefit they receive is an innovative pathway off public assistance for their clients. They will contribute staff time to planning, design, and serving as liaison. At least fifty specialty food businesses will participate in this project. The benefit they receive will be modernizing their businesses and developing new market opportunities through the NII. They will contribute staff time to the workforce development training.

**B. Involvement of the Community.** In designing this project we facilitated a joint design process that we have implemented and refined over our thirteen-year history. We convened a meeting of all the partners in the project and elicited their input into the project design. We also involved students from the Computer Opportunities Program class. The project was discussed at three SEORF steering committee meetings. Separate focus group interviews were conducted with Warren Haydon of the Athens County Department of Human Services, and with twenty specialty food firms. The stakeholder group will meet quarterly to evaluate progress towards objectives during the two-year project period.

**C. Support for End Users.** The end users are high school students and workers in small specialty food businesses who can benefit from training in computer information and communications applications so that they have increased employability and higher quality jobs. They will be included in all design and evaluation activities. Since many of the end users will be from low-income backgrounds, all materials will be checked for reading levels. Since many workers will have had negative experiences with classroom style training, this training will be organized into small groups with an interactive, hands-on approach. Sites for training and computer access will be conveniently distributed throughout the country at area high schools. The students and workers are not only end users, but many will also gain skills to provide technical support to others. The benefit to end-users will be economic self-sufficiency and all of its attendant improvements in overall quality of life.

**D. Privacy.** SEORF has developed policies related to privacy, and this issue will also be addressed in the joint design and continual improvement sessions. SEORF will work with the area high schools to ensure that grades are administered in a way that protects students right to privacy. In addition, any data related to the participation of community members receiving public assistance will be handled according to the Athens County Department of Human Services policies on privacy.

## V. Reducing Disparities

A. **Description and Documentation of Disparities.** Athens County has the highest poverty rate in the state, at 32% of the population. The unemployment rate, which is currently 12.6% at a time when much of the rest of the country is experiencing record low unemployment, is only one part of the picture. The county is served by four different phone companies (Ameritech, GTE North, Alltel Ohio, and United) with quite different capacities for investing in new infrastructure. Numerous analog lines and even party lines can be found throughout the county. In most of the high schools, 286 and 386 computers or Mac classics are the norm, and many classrooms do not have computers. Commercial services cost \$20 per month, so SEORF is the only option for access for most people in this area.

B. **Strategies for Overcoming Barriers to Access.** The Appalachian Teleworkforce Development Project has a short term and long-term strategy for overcoming the barriers to access. First, the five community technology centers in the county's high schools will provide sixty new computers with Internet connections accessible to small businesses and their employees (as well as to other community residents) and distributed throughout the county. And secondly, the program builds a knowledgeable citizenry of owners, workers, school staff, and students who will experience the economic benefits of computer communication technologies and community networking and become articulate advocate for increased access on the community, state and national levels.

CTCs  
460  
computers

## VI. Evaluation, Documentation, and Dissemination

A. **Evaluation Plan.** The Evaluation will be conducted by Metasystems Designs, Inc. of Arlington Virginia. They are a nationally known leader in assessing and evaluating network-based projects. The lead evaluator, Lisa Kimball, has worked with national corporations including Hewlett Packard, Xerox as well as numerous universities. Her qualifications, letter of support and evaluation plan can be found in Attachment F, Evaluation Plan.

see plan

B. **Documentation Plan.** Project staff will work with the evaluator and the joint design team from the outset of the project to ensure adequate documentation and ease of reporting. Documentation tools will include baseline surveys and focus groups, activity logs for project staff, student journals, modernization plans of small businesses, and minutes from quarterly evaluation/re-design meetings of project partners, including project beneficiaries.

C. **Dissemination Plan.** ACEnet will publish quarterly reports on the project on our website on SEORF so that other communities can learn as the project unfolds This project will result in a handbook on employing community-based networks to deliver workforce development. Dissemination will take place in the form of documentation posted on SEORF and pointers to this documentation posted to appropriate electronic mailing lists. In addition, ACEnet staff will discuss project progress and results at state, national or international conferences in the next year, including conferences sponsored by the Association for Enterprise Opportunity, the Association for Community Networking, and the Alliance for Public Technology. ACEnet will also present the information to our local Private Industry Council (PIC) and the Ohio Bureau of Employment Services (OBES) the regional and state entities responsible for workforce development activities.