

KCNet: A Model for Rural Connectivity

A summary of Keystone Community Network, Lock Haven, Pennsylvania Keystone Community Network - Mission and Goals

By *Suzanne Foust*
Manager
Keystone Community Network
Clinton County, PA

Keystone Community Network was established to provide the infrastructure for electronic access to local, state, and global information. The concentrated objective is to provide and enable "Education for Everyone, Everywhere, Everyday."

The mission of KCnet will be to maintain a rural area network that will offer electronic services for the educational, cultural and economic advancement of local communities. KCnet will provide access to electronic information for all citizens, utilizing a variety of resources, human, economic, and technical.

Human resources to be used will be an enthusiastic and hard-working board of directors and their capable and friendly staff. Human resources will also include knowledgeable volunteers of any sort who are willing to spend their time to further this endeavor. Economic resources will be fees for services, loans, and grants. And technical resources will include the equipment needed for this electronic phenomenon to happen.

KCnet will provide to the community an Internet access, empowering the community to become life long learners, promoting community and economic development.

KCnet has in place the infrastructure to provide global access to the community to enable them to become a viable player in economic development as we move to the year 2000. Clinton County and its neighbors must have the access to information technology and a trained work force to compete in the 21st century.

Present Situation

Keystone Community Network incorporated in June 1995 and established its first accounts in October 1995. The network has realized tremendous growth. In November 1995, the network had 41 individual accounts; in May 1996, the network had 524 individual accounts. In November 1998, Keystone Community Network boasts more than 2,000 member accounts.

As a member of the Keystone Consortium Network, KCnet is involved in an educational Internet effort of Lock Haven University, Keystone Central School District, Bald Eagle Area School District, Bellefonte Area School District, Centre County Vocational-Technical School and State College School District. Home and school education will be delivered, via the Internet. Consortium sites participate in video conferencing.

Keystone Community Network is a key instrument necessary to unlock community, economic development, human resource agencies, government, as well as other areas such as the medical community to achieve both continuous growth and better life for all involved in and around Clinton County.

Management: KCnet board of directors are: President John Schroeder, Vice President Paddy O'Hara-Mays, Secretary Donald Houser Jr., Treasurer Rena Dietrich, R. Keith Kelly, Rich Marcinkavage, Donald Tyler, Judy Yoho, Amy Toner, Larry Lytle M.D., Donna Gebhardt, Mary Ann Furst, and Donald Miller.

Staff members include: Suzanne Foust, General Manager; John Stevenson, Network Administrator; Earl Keen and Jeff Miller, Help Desk Managers; Crista Zartman, Education Specialist; Doug Lamey, Help Desk Technician; Roberta Way, Bookkeeper; Danny Merrifield, Web Page Editor.

KCnet and Economic Development

Lock Haven has historically been a thriving economic center serving the rural and wooded north central Pennsylvania region. In the 19th century, the city's location on the West Branch of Susquehanna River was a factor in its original success, when logging was the predominant industry. In the last 10 to 15 years, Lock Haven has endured some difficult economic times. The loss of the Piper Aircraft Corporation in 1984 had far reaching impact. Subsequently, the downsizing of other economic entities, such as the Woolrich mercantile company and Champion parts, have added to the slump.

The region has several fundamental assets that increase the potential. Included are: access to interstate highways, a serviceable airport, beautiful natural surroundings, low crime rate, and low cost of living. The infrastructure is intact and expandable for power, sewer, water, cable television and telephone. Keystone Community Network provides access to the "Information Superhighway." For jobs, job training and the attraction of clean new industry, access to the Internet is fundamental to the future of Clinton County. KCnet also has the ability to advertise and enhance tourism to Clinton County.

KCnet and Human Services

As part of the Enterprise Zone grant recently awarded to the area, many human service provisions have been funded. Being able to facilitate these serv-

ice providers with network access will enable them to greatly enrich and expedite their goals.

In summary, Keystone Community Network experienced tremendous growth from the start in October 1995 of 41 accounts to October 1998 of about 2,000 individual and business accounts. The Board of Directors believes this is only the start to creating a 21st Century telecommunications model community in Pennsylvania. The future lies in the ability to bring technology into the lives of every citizen in Clinton County. This can be accomplished by placing computers and Internet access in restaurants, shopping establishments, and in senior and low-income housing. The local high schools would remain open in the evenings to allow students and general public access. The classroom/lab at KCnet would be a busy place, day and night, with adult learners.

The Board of Directors of Keystone Community Network possesses a vision for the 21st century model community and we believe we have started to build that model for the future in Clinton County.

Reflections of Suzanne Foust, General Manager

To say we all walked into this with our eyes closed is an understatement. Because of the lack of Internet access at an affordable price in the Clinton County area, when Keystone Central School District constructed their own Internet access, the public was very pleased. I'll never forget talking to a resident of the county whose children were grown and out of school who said, "Well, finally Keystone Central School District is doing something smart with my money."

When Keystone Central School District suggested the public might want access at a low fee, the reception was greater than anyone would have imagined. Establishing a non-profit corporation and setting the monthly fee at \$10 for membership, Keystone Community Network was created. Goals were to provide Internet access at a reasonable rate and to increase the economy of the area through education. A core of people had been studying community networks in other states and wanted to replicate the plan in Clinton County. Before the plan could unfold completely, there were 200 people signed up, some paying \$120 for the first year. A seven-person board of directors was quickly increased to nine, then 11 and finally 13. There was much work to do and many people needed to do it!

The Community Network started by using dial-in modems owned by the school district: soon we had more than 200 members and had to buy more modems. Each modem and the associated equipment and phone lines cost about \$1,000. And we had three calling areas, so we tried to equip three schools with modems for the public to dial into. The county commissioners loaned us enough to buy our first modems — \$20,000, which bought 20

modems to add to the school district's existing equipment. Our payback was \$1,000 per month for 20 months, which we fulfilled. Since then, we have purchased more equipment, spending nearly \$200,000 for equipment and our fiber line. Our phone lines now cost about \$70,000 per year. From October 1995, when we accepted our first annual membership to June 1998, we have serviced over 2,800 families and/or businesses. We presently have about 2,000 members but membership will increase to over 2,200 by Christmas.

The other goal of this group was to increase the economy of the area. One way to do that was to "blow our own horn," so to speak. Even people within the county were not aware of all the small businesses that they could be patronizing, locally. We set our sites on making web pages for all the small businesses in Clinton County. The KCnet web site is now host to over 300 businesses and organizations, and we have just begun! The world now has access to the Amish Workshop in Beech Creek, a doll collection in Renovo, collectibles in the mountains of Swisssdale, and log homes, produced in Clinton County and shipped to Japan. And the e-mail addresses of these entrepreneurs end with @cub.kcnet.org!

Keystone Community Network - The Fiber Model for Rural Connectivity

It is exciting for me to stand here and tell you about KCnet by first telling you about our beginnings and about when we didn't exist.

In 1991, the Internet existed. Connection to the Internet was most often through higher education institutions. In Clinton County, it was available to Lock Haven University staff, students and a few guests. It was also available through cost-prohibitive long-distance phone calls to an expensive monthly service. Information received was in text format; "browsers" were new and seldom used. Mosaic was the most commonly known one.

Lock Haven University provided Internet service to its faculty and students and a few community members. I was one of those community members. So was Judy Yoho, a science teacher at Keystone Central School District, who was the driving force for the school district's project to connect schools and provide Internet access. Paddy O'Hara-Mays, a faculty member at Lock Haven University, was also accessing the Internet through her LHU connection. She had created web pages for her undergraduate students, which linked them to the wealth of information that was available. In 1994, fate brought the three of us together.

Judy and Paddy had already worked together on a project. They had obtained a National Science Foundation grant for planning a community and school connectivity. They would connect all the schools by some sort of phone line or fiber, then connect businesses and homes. The planning money was granted.

This is where I came in. After that grant money was available, I contacted Judy to ask if I could get county government involved in this project. I had seen the Internet - text only - and wanted more of my colleagues to be able to access this, too. As a county employee who was using information from Internet sources, I knew others should use it. I was invited to join a group to visit a "connected community," Blacksburg, Virginia.

Never in a million years could I have imagined what I saw in Virginia. The telephone company gave us royal treatment. We visited their network center. We saw hundreds of modems connected to hundreds of phone lines. We heard about people who got very upset if they couldn't connect. I could not imagine! A little old lady calling, very upset because she couldn't get her e-mail? And, she talks to a sister in Ireland? Never!

Then we visited the library in Blacksburg. It was a school holiday, yet there were children learning, there at the library. They were connected to the Internet at computers provided for public access. Yes! True, but hard to believe. There were four computers; three had elementary school children at them, standing three deep. The fourth one hosted a middle-aged man, accepting coaching from a student. "Hit Enter, click on this, let's look at this..." I was impressed. And when we got a chance to use the connection there at the library, we visited Blacksburg via the Internet! I saw our hotel, the menu at the local restaurant, and Virginia Tech campus directory. I saw a local flower shop's offerings - pictures of arrangements that I could order on-line. There was even a grocery store from which I could order groceries and pick them up or have them delivered! Local apartments were directly connected to the Internet, wired to Virginia Tech. And owners said the apartments were 100% occupied. I was so excited, I couldn't wait to get home and help to work on the next application to the National Science Foundation.

To make the next part of the story short, I will simply say funding from the National Science Foundation was not granted. The three of us looked at each other and asked, "Well, do we quit?" "No way!" Without grant money, we would just move more slowly. The momentum was there. We had already begun a public awareness program and selection of board members for Keystone Community Network.

Early in 1995, a public meeting was held with chairs set for 100. When the audience arrived, there was standing room only. A presentation by school officials showed what the Internet looked like. I remember Judy Yoho asking, "How many here would like to be able to access the Internet?" and all the hands went up. How many would pay for it? Some hands went up. How many would pay \$10 a month for it? Quite a few hands went up. How many would pay \$20 a month for it? No hands went up. We had our answer.

The next chore was creating an organization that could charge for a service and buy equipment. We contacted a friend, an attorney. He volunteered to help create Keystone Community Network, Incorporated. Could one of us stop in to talk about it and explain what we had in mind?

With both Paddy and Judy teaching, I was the one most able to take the time for this. I was a county employee, manager of the county conservation district. Well, the attorney said, "Who are the officers of this corporation? I need the president's signature." Not wanting to delay any at all, I told him I'd sign and the other two better agree to my being president. We needed a secretary, treasurer, and vice president. I said, "OK. Paddy's secretary-treasurer and Judy's vice-president." We served in those offices from May 11, 1995, the date of our incorporation as a non-profit corporation, until June 30, 1996.

For the next year, we followed what I had done in Rotary. After serving as president of our local Rotary Club, I served another year as past president. On July 1, 1996, Vice President Judy Yoho became president, Paddy O'Hara-Mays became vice president and I became past president. Now, let's hear about the rest of the board.

Having worked with several boards during my 23 years with the conservation district, I related my opinion about the make-up of the board. I felt we should try to have representation from various areas - schools, government, and the community. This was supported by a set of by-laws that we had downloaded from the Internet that was for a similar service such as what we thought we'd be.

Since conservation district boards are seven members, I suggested we have seven. That's an easy number to work with. And since we already had three, we only had to come up with four more. Judy was from Keystone Central School District, and base of the whole network. Paddy was from Lock Haven University, the first Internet Service Provider in Clinton County, and I was from county government. We decided to ask one more from each of those fields, then ask one person to represent the general public - maybe a businessman. A school board member, a member of Lock Haven University Trustees, a county judge, and a business owner completed the board.

After several months, working with a seven-person board, we found we needed more help. We needed to work on our by-laws and we needed technical help. My husband had owned a corporation and had experience writing by-laws. He could also provide some of the technical assistance we needed for our members. He was asked to join the board and a Bell Atlantic retiree was also asked. During the next two months, we had by-laws, mission statement and a business plan — and two more board members. There was work to be done and people came out of the woodwork to do it. In fact, during those first two years, we had so many committees we needed 13 board mem-

bers to chair them all. One of the original members missed two meetings and said when he left there were nine and when he came back there were 13!

Now, you heard about how we started. You heard about our incorporation in May 1995 and our board of directors - how they grew from seven to 13. Our bylaws required quarterly meetings, but we had monthly meetings, with work sessions and committee meetings between.

We accepted our first membership in October 1995, and by December, we had 200 members and no modems. We were using the school district's modems - 23 of them - sharing with school employees. My husband was working part-time for KCnet and during our evenings, we served as help desk for members.

Clinton County Commissioners then loaned us \$20,000 for modems. We purchased 20 modems with the money. What a relief to at last have something to contribute in this endeavor, even if we had to borrow the money to do it.

After one full year of incorporation and about eight months of taking memberships at \$10 per month, we had about 600 members and 56 modems. Our office was the gym storage room and we shared a server with the school district. At our first annual meeting, July 1996, we announced we would be buying a server in December at a cost of about \$20,000. However, attempts to borrow money proved futile; we didn't have a track record. We applied for Rural Development grant money, but there was none. In fact, we all invested personal money, over \$1,000, to host a meeting to appeal for grant money. Banners, coffee cups for the attendees, speakers. Still no grant money, and the Clinton County economic outlook was not any better. But we had no choice. We raised our rates to \$12 per month and put a stop to guest memberships. One year later in December 1997, we bought a server for \$10,000. We had 1,200 members.

In the meantime, Judy Yoho, technology coordinator of Keystone Central School District, the person who had actually created "KCnet," started working on a grant application for Link to Learn funding. She and Bob Little, director of the Computer Center of Lock Haven University, presented information to our board of directors, asking for support for this grant application which would connect many schools and Keystone Community Network. The proposed name for the grant was *KCnet, the Fiber Model for Rural Connectivity*. The reception was cold, to say the least. It was difficult for our board to separate Judy's intentions for Keystone Central School District and her intentions for Keystone Community Network.

Looking back, I must admire the board of directors for their feeling of ownership of KCnet; their desire to be a separate entity. But we were so tied in with the school district that it was hard to separate us. And, to make matters more difficult, Judy Yoho served as president of the Board of KCnet, in this

second year of operation. As devoted as she was to KCnet, she was also a loyal employee of the school district. Directors didn't know whom she was representing when she presented a plan.

Link to Learn became a familiar term during the next several months. five-hour meetings were not uncommon. Midnight oil was burned and the grant application was submitted. Approval of the grant created more meetings; more apprehension; more obligations; more tension. Bob Little, the project director for this Link to Learn Grant, worked long and hard to get us organized. This association among the university, these school districts and KCnet was all new and a bit unnerving at times, but, it also allowed growth, camaraderie among school districts and the public, and a service for students and teachers unlike anything they could have ever expected.

KCnet, the Fiber Model for Rural Connectivity, funded by the state initiative Link to Learn, has provided a 100-megabit fiber connection to an area about the size of the state of Delaware. Presently, it requires four meetings per month for me. Our consortium is made up of four school districts, a vocational school, a university, and a community network. There are about 20 other people who are working as much, some more than I am, to complete the model. If you can for a moment, imagine the meetings among the representatives of these entities - rivals in sports and scholastic contests. We work together for the common good. We are sharing resources and expertise. We are planning to buy services and equipment, jointly. Imagine. Our next challenge is creating a body that can legally do these things for the benefit of all. We will succeed, because, to quote a colleague, "We gotta make this one work; we don't have time for another one."

If you look at Keystone Community Network on a yearly basis, you will see:

In October 1995, we took our first \$120 for an annual membership.

In October 1996, we had about 700 members, and 66 modems. We received a \$1,200 grant from Clinton County foundation. A local businessman, James Ely, donated his services to make Keystone Community Network shirts and cups.

In October 1997, we had about 1,200 members. We moved out of the gym storage room and into a storefront in downtown Lock Haven. We were very fortunate. We found a place in the busiest block, on the busiest side of the street with a great design. We rented about 800 square feet for \$375 per month. A common area includes about 100 square feet of front windows.

We have increased our store size twice. We added a network operating center and a help desk for the consortium and we are in the process of constructing a Senior Net Learning Center.

Presently, we have about 2,000 members; we have 250 modems and phone lines. We continue to grow. We have grown at a rate of nearly 5% per month.

Keystone Community Network - a typical day

If you could come to Keystone Community Network on a typical day, you would see:

At our member help desk, Earl Keen, a volunteer. He is 50 years old, educated as a teacher, on disability. Earl works our help desk four mornings a week. He has the patience of Job. He's not a technical person, but he can walk someone through solving simple problems. Most of the calls ARE simple problems. If the problem isn't simple, Earl turns the phone over to a technician.

A technician, Doug, is a graduate of South Hills Business and Technology School. He landed a decent job in a high tech industry, but works 2 to 11 p.m. His mornings are free and he works for minimum wage for KCnet and loves every minute of it. He answers the tougher questions and if he can't get a person on-line, you will hear him say, "Can you bring it in?" We set up about 100 computers per month, ready for the Internet. Most of these are older models, not Internet ready like the new ones. But there are probably 20 of those 100 each month that are new, out of the box, with owners who are scared to death to "hook them up and turn them on." Some of these people spend an hour or two with a KCnet staff person and leave knowing where the plugs go in and how the Internet looks on their own equipment.

Doug and Earl both leave at noon. I've been in the office all morning, dealing with individual accounts, taking phone calls and visits concerning KCnet. When Doug and Earl leave, I'm the help desk. Actually, I'm pretty good at that. It hasn't been that long since I've needed a technician myself, so I'm very sympathetic.

Often, Roberta is there by noon, too. Bobbi is our bookkeeper, but she helps on the desk, too.

By 1:30 p.m., our network administrator arrives. He's a computer science major at Lock Haven University and works with us from 1:30 to 6 p.m. most days. He stays later when we need him and conducts several learning sessions each month - one at Bucktail High School one evening a month.

At 3:30 p.m., our office and network assistant Jeff Miller arrives. He's been a Keystone Community Network employee for a year and a half. Before that, he volunteered 200 hours to help us get started. He's 16 - a junior at Bald Eagle Nittany High School.

Interspersed among the regulars each day are students who are (1) a vo-technical work experience student who comes two days a week for experience in web-page creation and networking; (2) a high school senior who has two study periods at the end of his school day, and chooses to come to KCnet instead. He helps with our calendar of events, church pages, and our trading post. (3) A third student comes in after school, three days a week, and is learning about Windows 98 and computer hardware. He spends a half-hour with a tutoring program for Windows 98 and he helps when we have a modem to replace. He will help us network the classroom upstairs.

Four afternoons a month, we hold classes that are a little more advanced than beginners' classes are. We hired an education specialist for this. Until this summer, my husband did most of the education for Keystone Community Network, but after three years of working for KCnet all day together and then going home and discussing KCnet all evening, we decided it would be better for him to do something else. He's now in the process of building a house in the mountain for us. We bought the land 15 years ago and never took time to build on it. When the phone rings at night, he still is our help desk at home and I still send many of the e-mail technical questions to him. He's a great asset for KCnet.

Once a week, now, to launch our Senior Net Learning Center, we've been having a morning for seniors to stop in and learn. One week, they heard and saw how to browse. We have leased 10 nice computers for our classroom and these senior citizens get to use them if they want. For two weeks we did e-mail. This week, Doug took a computer apart, explained what each piece was and then put it back together. Mike, my husband, helps at these once-a-week classes, which are funded by a grant from International Paper Foundation, Lock Haven plant.

A typical day would show you many of these things going on at Keystone Community Network.

Another phase of our non-profit corporation is the program to provide public access to encourage public education.

The Federal Communications Commission (FCC) was upgrading their computers. One of our members whose friend was a decision-maker at FCC called and informed us that this federal office could award their old computers to educational institutions, under a presidential directive. Would we qualify? On behalf Keystone Community Network and Keystone Central School District, I asked for 10 computers. We got 25 and split them with the school district. We have five in our classroom, have placed three of them out for public access - two at a coffeehouse and one at a bookstore. We will be putting five of them in the classroom of a tutoring service that moved into our building, knowing that we could provide a direct connection to the Internet

through the KCnet connection. Occasionally, we loan out a computer to a person who needs it. We are trying to follow through on our original goals to become another Blacksburg, Virginia.

The other business on the first floor in our building is a tax service. Each year, during his busy times, the owner spent too much time and money connecting to the Internet. He is now directly tied into our network with a direct connect - no dialing in anymore.

A Catholic School has connected, by ISDN, to us, and has fast and easy access to the World Wide Web and e-mail through Keystone Community Network.

And now we've tried a T-1 connection from a nearby business to Keystone Community Network. It works, too.

Building Bridges between Government, Business and Education

Our next project is what we're calling "Building Bridges between Government, Business and Education."

As a former county employee, I know the need for communications between county, city and local governments. In an area as large as ours, about 1,000 square miles, and is sparsely populated, about 37,000 people, many services are shared. Road services, law enforcement, and technical services, to name a few. Maps are extremely important, in planning and emergency services. A county geographic information service now exists. The county has aerial photographs as well as maps of infrastructure and properties of the county, all digitized and transferable through a computer network. A direct line, a direct connection for all of the offices of the 29 municipalities of the county would be the ideal situation to enable sharing of information among all the governmental offices.

Keystone Community Network plans to start with the county. Building Bridges between Government, Business and Education was one of the four projects proposed for Rural Pennsylvania funding. It was one of the three not funded. Therefore, we will still move ahead; we will simply move more slowly.

Plans have begun. A Request for Bids will go out next month. We need 100 megabit or ATM connections between KCnet, the county courthouse and courthouse annex, the county's Economic Partnership, the city of Lock Haven's city office building, and an adult training center, West Branch Technology Center. Three runs of fiber, each approximately 1,200 feet, would connect all of these sites.

Phase II will be to connect the Catholic School, a Christian School, the public library and the Lock Haven hospital.

Our plans are to become an electronic village like the one we saw in Blacksburg, and to enable education for everyone, everywhere, every day.

The Keystone Consortium Network

Attendees of the Telecommunications and Economic Development; Building Capacity in Rural Communities Conference at Pittsburgh's Clarion-Royce Hotel, November 6, 1998, received a gift from Keystone Consortium Network - a key chain flashlight. These were the same as those given to attendees of our celebration of the completion of this Link to Learn Initiative fiber network, September 25, 1998.

Let me describe this network and our use of it, so far.

The network, the cable that physically connects schools, is 100-megabit bandwidth. To give you an example of the speed difference between a 56K modem and a 100-megabit fiber connection to our server: at home, it takes me 19 minutes to download our database from our server. At work, through fiber, it takes four seconds.

That's the data part.

The video is wonderful. Three out of four of our consortium meetings are held by videoconference each month. Since Keystone Central is about 40 miles from State College School District, we meet at State College and Keystone Central and vary the sites in between. At the present time, through the Link to Learn grant, all sites can receive four others. They can send one and receive four. So our meetings can be held at five different sites, all together. It's wonderful. This is real time, full motion video, just like you see on TV. When you are there for the discussion, it is just that - a discussion. We talk back and forth and you have the feeling you're all in the same room. Real time, full motion.

Other proofs of concept, besides meetings and discussions, have been teacher training and technical assistance via the video. We're planning a December joint Lock Haven-Renovo Internet user class. The instructor will be in Lock Haven with a group of KCnet members and a leader will be in Renovo's Bucktail High School with a similar group to be a part of the whole group, 35 miles away.

In Renovo, at the school, the group will use a video cart owned by Keystone Central School District. It has 2 monitors - one will be used to set up their own site - to be able to see what we at Lock Haven will see. The other is

their receive channel - the one they will watch us on. The cart is on wheels; the camera, mounted just above the monitor, is controlled by a hand-held remote control, much like the remote control for your TV set.

At KCnet, we have a 35-inch TV set with picture-in-a-picture. We see ourselves in the inset to set up and we see a 35-inch view of the other site. A common video camera, a camcorder, and a VCR and the remaining pieces to our equipment, all connect to fiber that connects our sites.

By telling you all these intricate details of Keystone Community Network, I hope I haven't bored you. My goal was to show you that

In order to be successful, you need:

- ✓ commitment
- ✓ cooperation
- ✓ collaboration
- ✓ creativity
- ✓ communication.

Because, as we learned early on, there is no cybermouse-waving magic fairy who clicks and creates a connected community. You need people with commitment, who can cooperate and collaborate. You need people with a vision, with creativity, who can network with others in the true spirit of communication.

The State's Link to Learn site, available at:

http://www.state.pa.us/Technology_Initiatives/121.html (those are lower case L's for the html page), is an excellent source of information about this program and the various projects being conducted as a result of Governor Ridge's foresight. Our project description is located at <http://www.lhup.edu/kcnet/>. Keystone Community Network is: <http://www.kcnet.org/>. Each of the projects in the state will have its own reason for success, but I'll wager that at the bottom of each project is a driving force to share one of the best assets in the world, the Internet.

Foust received her education from:

Milton Area High School in Milton, Pennsylvania
Williamsport Area Community College, Williamsport, Pennsylvania
and Lock Haven University, Lock Haven, Pennsylvania

She is also a graduate of RULE - Pennsylvania's Rural Leadership Program.

Sue worked for 23 years in county government, resigning in April 1996 to work as a volunteer for KCnet, then in 1997, as a paid employee.

She served on the board of directors for four years. She has been business manager, managing director and general manager of KCnet. She now supervises a staff of five paid employees, three part-time volunteers and provides student training for the school-to-work, job shadowing, and vo-tech work experience programs.

This paper originally presented at *Telecommunications and Economic Development: Building Capacity in Rural Communities* on 6 November 1998 in Pittsburgh, PA.

Members, KCnet 1995-1998

