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- **Next message:** Ken Hammer: "Deregulation"
  - **Previous message:** Betty Dawn Hamilton: "Re: Aggregation and Competition"
  - **In reply to:** Betty Dawn Hamilton: "Re: Aggregation and Competition"
  - **Next in thread:** Betty Dawn Hamilton: "Re: Aggregation and Competition"

# Deregulation

Ken Hammer (*ken.hammer@ConnRiver.net*)  
Sun, 22 Sep 96 22:42:07 -0500

- **Messages sorted by:** [ date ] [ thread ] [ subject ] [ author ]
- **Next message:** Ken Hammer: "A civil society"
- **Previous message:** Ken Hammer: "Re: Aggregation and Competition"
- **Next in thread:** Betty Dawn Hamilton: "Re: Deregulation"

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Re: deregulation; delayed by a week of travel.

In digest 4 of week 3 jls@sdp2 (Jerry Snyder) said:  
Date: Fri, 13 Sep 1996 09:54:44 -0400  
Subject: Re: Checking in re us-nd  
>... putting forth their case that K-12 ought to get some minor  
>discounted rate while they reap enormous profits from deregulation.

Educators somehow seem to worship competition but despise any who succeed. The idea that someone will profit seems to totally obscure the reality that many also lose. Indeed, it is only in the case of highly regulated industries that all participants succeed and those who persevere get huge. In my view, the truer the competition, the greater the tendency toward multiple participants and the ability of competition to assure good value to purchasers. Of course that presumes diligent and informed consumers who have not been lulled into promiscuous purchasing by the false promise of government protection.

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K.F.Hammer Associates	Ken Hammer
management consultations	St. Johnsbury, VT 05819

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\*\* A witty saying proves nothing. -Voltaire

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- **Next message:** Ken Hammer: "A civil society"
  - **Previous message:** Ken Hammer: "Re: Aggregation and Competition"
  - **Next in thread:** Betty Dawn Hamilton: "Re: Deregulation"

# A civil society

Ken Hammer ([ken.hammer@ConnRiver.net](mailto:ken.hammer@ConnRiver.net))  
Sun, 22 Sep 96 22:42:54 -0500

- **Messages sorted by:** [ date | thread | subject | author ]
- **Next message:** [Betty Dawn Hamilton: "Re: Aggregation and Competition"](#)
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Re: "a civil society"

In digest 4 week 3, Frank Odasz <[franko@bigsky.dillon.mt.us](mailto:franko@bigsky.dillon.mt.us)> said:

The language of the marketplace says "Get as much as you can for yourself." The language of government says "Legislate for others what is good for them." We're missing the distinctive moral language of a civil society. All of us have to go out in the public square, and all of us have to assume our citizenship responsibilities.

Frank's view of business is so warped that it is not recognizable by me as the view of any business I respect. It is common only among those which have shaped themselves to exist in highly regulated and protected niches.

I'm no member of the religious right, but Frank's conclusion seems to be the advocacy of an atheist state where civil action takes the place of religion in the establishment of morals. How about going to church and influencing neighbors rather than each of us seeking to harness the power of all through the action of govt on our behalf?

I'd be much more comfortable with a 3-legged stool of government, business and religion where each was powerful enough to serve as a check on the others when they were not internally self-disciplined. I have no hope for a society still more dominated by reliance on government for all conscience.

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\*\* Glory is fleeting, but obscurity is forever. -N. Bonaparte

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- **Next message:** [Betty Dawn Hamilton: "Re: Deregulation"](#)
- **Previous message:** [Ken Hammer: "Deregulation"](#)

# Re: Aggregation and Competition

Betty Dawn Hamilton ([bhamilt@tenet.edu](mailto:bhamilt@tenet.edu))  
Mon, 23 Sep 1996 05:24:20 -0500 (CDT)

- **Messages sorted by:** [ date || thread || subject || author ]
  - **Next message:** EricElert@aol.com: "Sample Telecom Project requiring rate change"
  - **Previous message:** Ken Hammer: "A civil society"
  - **In reply to:** Ken Hammer: "Re: Aggregation and Competition"
- 

> I believe there is little to be gained by the public and students  
> sharing a common facility and believe that could lead to diminution of  
> the function of both. Your last sentence seems to state the same  
> thing.

O.K., I guess I misunderstood your message. Thanks for the clarification.  
I guess I thought that when you said you "doubt" the synergy of the two  
entities, that meant that we \*couldn't\* work together. We do.....it's  
just, as you say, we don't need to be one and the same.

Betty

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- **Next message:** EricElert@aol.com: "Sample Telecom Project requiring rate change"
- **Previous message:** Ken Hammer: "A civil society"
- **In reply to:** Ken Hammer: "Re: Aggregation and Competition"

# Sample Telecom Project requiring rate change

*EricElert@aol.com*

*Mon, 23 Sep 1996 10:21:51 -0400*

- **Messages sorted by:** [ date || thread || subject || author ]
  - **Next message:** Tom Hibbs: "Re: Welcome to Week Five of the US/ND On-line Seminar"
  - **Previous message:** Betty Dawn Hamilton: "Re: Aggregation and Competition"
- 

As Exec. Dir. for Technology Planning and Research for a large (for) Illinois school district, we teamed up with IBM, Ameritech, Prodigy, and others in a project called "Project Homeroom". IBM provided a computer to every student in one of our 5th and one of our 7th grade classes; Ameritech provided a phone line and modem, as well as the Ameritech Foundation provided the funding for a local university to perform the research; and Prodigy provided free software and access to their system...all for two years. Other companies provided misc. communication components.

The intent was to determine the impact of computers at home. The project nearly died on the concept vine, because we were unable initially to obtain special tariff rates from the PUC in Illinois that would allow Ameritech to install and provide a phone line at no charge. Through the efforts of many people, the objections were met, and the project proceeded to deliver excellent information on how the extended families of our students significantly gained from the experience, in addition to the intended student benefits.

It seemed that more energies went into getting through the red tape of tariffs than went into program design at the outset. This is not how competitive markets behave. I should add that there were heartwarming stories of "financially challenged" families joining together to find ways to be a part of the program as they recognized the benefits of improved communication and technology skills.

Eric Willard  
Elert & Associates  
972.390.7000

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- **Next message:** Tom Hibbs: "Re: Welcome to Week Five of the US/ND On-line Seminar"
- **Previous message:** Betty Dawn Hamilton: "Re: Aggregation and Competition"

# Re: Welcome to Week Five of the US/ND On-line Seminar

Tom Hibbs ([thibbs@k12.colostate.edu](mailto:thibbs@k12.colostate.edu))  
Mon, 23 Sep 1996 09:33:56 -0600 (MDT)

- Messages sorted by: [ [date](#) ] [ [thread](#) ] [ [subject](#) ] [ [author](#) ]
- Previous message: [EricElert@aol.com](mailto:EricElert@aol.com): "[Sample Telecom Project requiring rate change](#)"
- Maybe in reply to: [Bob Carlitz](mailto:BobCarlitz): "[Welcome to Week Five of the US/ND On-line Seminar](#)"
- Next in thread: [rmiller@mecn.mass.edu](mailto:rmiller@mecn.mass.edu): "[Re: Welcome to Week Five of the US/ND On-line Seminar](#)"

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>  
> \* What successful telecommunications projects have you been involved  
> with?

The Adventures in Supercomputing program instituted by Department of Energy grants originally in five states. Colorado State University administered the grant here. In Colorado the schools participating ranged in size from our largest in Denver to our smallest at my school (75 students average in H.S. during the grant period). The grant included an Internet connection - back in telnet and MOSAIC for WWW times. For four years, the connection was free. It still is a 56K frame-relay, that we now pay for, but the best part is the technical and pedagogical backup. We have gone from a local dial-up to being our own mail and WWW server in an area 200 miles from the technical universities in our state. In four years, we've seen the technical capabilities of local providers increase, but still far from "expert."

The other program was the US West / University of Northern Colorado connection grants. These were more influential to individual teachers as they were provided with free home Internet connections with some backup technically. The technical side is much stronger now than three years ago when the program started. The training in both programs has been one of the cornerstones. The free connections were also essential.

>  
> \* Did these projects depend upon any special telecommunications  
> rates?

I believe the service was bid to the lowest bidder who could provide reliable service, but rates were the same as being provided to any educational institution. Use of a frame-relay cloud to decrease costs was new at the time, but is probably common place now. The use of the (now) commercial carriers of Internet services has helped them become stronger for-profit companies.

>  
> \* Do your projects depend upon any particular tricks of the trade?  
> If so, describe these imaginative applications of telecommunications  
> technology, and indicate whether these applications might not be possible  
> in the environment of new Universal Service subsidies.

A trick of the trade was to have the original person involved with the Internet when there was a regional connection called WESTNET, was to have that person - very knowledgeable - in charge. Our technical side was the best in the State. Especially in rural areas, I see aggregation as a good possibility to lowering costs. If the Universal Service subsidies were used

to connect an area which had non-toll, local telecommunications service with a T-1 connection that would reconnect with up to 20 56KB connections directly to schools and contract for training 20 school network administrators and 1 area network administrators, then when the money went away, the connections and services would still be affordable. Pat Burns, WESTNET, admonishes that the training would need to be extensive and this would be a difficult task to have 100% success with.

This would be a combination of grant to a commercial provider for the Internet connection, the telecommunications provider for the lines, and a training entity for the support. Might make everyone happy, especially the schools who got temporary free connections while being trained. The training period might be as long as four years and could include any school in the service area even if they already have service and expertise. It would just make that group stronger.

- >
- > \* What are specific areas in which ongoing projects might benefit
- > from new Universal Service subsidies?

I train students as network administrators and now network "mechanics." We're also starting to do minor repair work on our own computers using a PC Maintenance and Repair class. The Universal Service should be used just to get all this started. Maybe, as with Eisenhower funds, the program would be so good that later Congresses would continue it.

- >
- > \* Are there projects currently in the planning stages whose
- > viability will depend upon the structure of new Universal Service
- > subsidies? If so, indicate how the subsidies should be structured to
- > assure the success of these new projects.

Universal Service subsidies provided to the Internet provider for connecting a school, or a telecommunications provider for connecting a school, or to a training entity should be available to any project that also meets the guidelines and therefore would make their dollars go much further. We have several such programs in Colorado already in progress or in the planning stages.

Tom Hibbs  
1995 Colorado PAESMT  
Cheraw High School

- 
- Previous message:** [EricElert@aol.com](mailto:EricElert@aol.com): "[Sample Telecom Project requiring rate change](#)"
  - Maybe in reply to:** [Bob Carlitz](#): "[Welcome to Week Five of the US/ND On-line Seminar](#)"
  - Next in thread:** [rmiller@mecn.mass.edu](mailto:rmiller@mecn.mass.edu): "[Re: Welcome to Week Five of the US/ND On-line Seminar](#)"

# Week Five Topics

Kevin Conde ([KevinC@sutter.k12.ca.us](mailto:KevinC@sutter.k12.ca.us))

Mon, 23 Sep 1996 08:35:12 -0700

- Messages sorted by: [ date || thread || subject || author ]
  - Next message: John D. Gravelle: "The Power to Change"
  - Previous message: ;"
- 

The week five topics are:

#1: \* What successful telecommunications projects have you been involved with?

I designed and implemented the ISDN network for Marysville Joint Unified School District in Marysville California. This consisted of building a WAN connecting 18 geographically separate locations into one logical network using 128K ISDN circuits. It also included installing networks at the schools, connecting and configuring the servers in the offices, and workstations in the classrooms. I now working for Sutter County Schools and am repeating this project for them.

#2: \* Did these projects depend upon any special telecommunications rates? If so, give a brief description of these rates and indicate whether you think these rates might be jeopardized by new Universal Service subsidies. (This could happen if, for example, state PUCs were to decree that new subsidies supersede old rate structures.)

We used a Pacific Bell program called Education First for some of these connections. Pacific Bell offers free ISDN installation and one free year of service to schools and libraries if the connection is used in direct support of student activities. I can't predict whether or not PacBell would continue this program if the a new Universal Service program required them to extend now unavailable services to small rural schools. Several of my small school districts want to connect to our network, but can not because ISDN is not available in there area, and Pac Bell does not intend to install it - too expensive with little hope of any return on the investment. We have a WAN only because this PacBell program made it affordable.

#3: \* Do your projects depend upon any particular tricks of the trade? If so, describe these imaginative applications of telecommunications technology, and indicate whether these applications might not be possible in the environment of new Universal Service subsidies.

ISDN is not as reliable as Frame Relay. We had a lot of trouble, and still do, keeping the circuits up. It too a lot of close work with PacBell and the datacomm equipment vendors to sort out problems. If the new Universal Service subsidies do what we hope for we will be able to afford to move away from ISDN and to Frame Relay.

#4: \* What are specific areas in which ongoing projects might benefit from new Universal Service subsidies?

We have several small districts that want internet connectivity, but will not get it unless the new Universal Service subsidies require the phone

companies to provide that service at an affordable rate.

#5: \* Are there projects currently in the planning stages whose viability will depend upon the structure of new Universal Service subsidies? If so, indicate how the subsidies should be structured to assure the success of these new projects.

Basically the same answer as #4. We are not actively planning, more like waiting for the next major change in datacomm service, wether it be Universal Service subsidies that may frame relay available, or it be some type of wireless/satelite technology that becomes practical/affordable.

Kevin Conde  
Technology Coordinator  
Sutter County Superintendent of Schools Office  
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- 
- **Next message: John D. Gravelle: "The Power to Change"**
  - **Previous message: :**

# The Power to Change

John D. Gravelle ([gravelle@dwave.net](mailto:gravelle@dwave.net))  
Sun, 22 Sep 1996 21:43:00 +0000

- Messages sorted by: [[date](#)] [[thread](#)] [[subject](#)] [[author](#)]
  - Next message: [Bob Carlitz: "tricks of the trade"](#)
  - Previous message: [Kevin Conde: "Week Five Topics"](#)
  - Next in thread: [Eugene Stovall: "Re: The Power to Change"](#)
- 

Hi all,

I have read others' 92 comments daily and appreciate all I have learned from all of you. The technical as well as the pedagogical posts are excellent. I wish to enter a more philosophical thread and hope others will followup.

We, as educators, can lobby the FCC through this and other venues. Yet, my experience precludes success. Bill Cosh has well represented the post passage results of Wisconsin's telecommunications bill. The only group that can change education via telecommunications is the FCC.

Mr. Hunt, Commissioners, and the many lawyers at the FCC: You have the power to change the direction of PK-12 education.

You alone have that power.

I am positive that the FCC has the technical advisors who understand the present technology and who are aware of the different evolving technologies. I am positive the FCC has the lawyers who can write regulations that will supply a Universal Service plan to all PK-12 and libraries that will supply us with the needed resources to change education.

I wonder, though, if the FCC can withstand the pressures of many large companies, many lobbyists, and national political pressures.

In the summer of 94, before the Wisconsin Telecom bill was passed, a major Milwaukee paper had a headline that stated Kids would be the FIRST on the SuperHighway. I called the reporter and asked him who supplied him with the facts. His source was a telecommunication company. I lobbied for the Wisconsin bill and worked with a regional president of one of the telecommunication companies. After passage, he would no longer accept calls from me about education issues.

I do not believe our efforts here or efforts from many other sources will balance out the many who will oppose us. They have the expertise, the money, and the personnel to interact with the FCC in ways we would not and could not consider.

Simple put, Mr. Hunt and the Commissioners of the FCC have the power to change education profoundly. Do they want to see education changed?

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- **Next message:** Bob Carlitz: "tricks of the trade"
- **Previous message:** Kevin Conde: "Week Five Topics"
- **Next in thread:** Eugene Stovall: "Re: The Power to Change"

# tricks of the trade

Bob Carlitz ([bob@info-ren.pitt.edu](mailto:bob@info-ren.pitt.edu))

Mon, 23 Sep 1996 11:29:31 -0400 (EDT)

- Messages sorted by: [\[ date \]](#) [\[ thread \]](#) [\[ subject \]](#) [\[ author \]](#)
- Next message: [Jim Wiljanen: "Educational Networks in MI"](#)
- Previous message: [John D. Gravelle: "The Power to Change"](#)

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In the spirit of this week's questions I wanted to pass along some techniques that we have been using in Pittsburgh to provide low-cost service to local schools and community centers. This work is part of the Common Knowledge: Pittsburgh and Bridging the Urban Landscape projects. Pointers to further information can be found on the Information Renaissance Web server,  
<http://info-ren.pitt.edu/activities/activities.html>

1. HDSL. This is a telephone technology that allows one to obtain very high bidirectional data rates over conventional twisted pair copper lines. The majority of telcos now use this technology to reduce their internal costs for the provision of T1 service. To my knowledge these cost savings have not yet been passed along to consumers, but they can be substantial. Using something called LADS lines (also known as dry pairs in telco jargon), we have attached HDSL drivers at school sites and our project's central site to obtain data rates ranging to 384,000 bits per second (1/4 T1) to 1,536,000 bits per second (full T1). The monthly cost for this setup is about \$60, which is something like 1/10 the cost of a typical T1 line. The down side to this technology is that we have to maintain our own hardware, and the throughput is dependent on line quality variables which are not under our control. But it is a good indication of where technologies for a telco's copper plant are heading.

2. Ethernet over cable TV. Using the old coaxial plant in Pittsburgh we have been able to establish 10 megabit per second shared bandwidth connections between our project's central site and selected school and community center sites. Maintenance of the old plant seems inadequate to keep these services going on a reliable basis, but communities with newer fiber/coax hybrid plants could use this type of service quite effectively. The intrinsic cost of this type of service is low. TCI's @HOME service, for example, is being introduced in some communities at \$40 a month, and I believe this includes a comfortable profit margin for the service provider.

3. ISDN in Speech Bearer Mode. ISDN technology can provide 128,000 bits per second data service at low monthly costs - around \$40 a month in our area. The catch is that most telcos charge very high time charges for this type of service. A trick that we have used is to set up calls in speech bearer mode, since there are no time charges for ISDN voice calls in our area. The available bandwidth drops to 112,000 bits per second under this arrangement, and some brands of ISDN routers don't support ISDN voice calls. These caveats aside, we have found the service to be quite reliable.

The techniques described above all have the potential to provide high-quality, low-cost connectivity for schools, libraries and homes. There are, however, important regulatory issues associated with each of them.

a- There is no meaningful competition for the provision of data services in our region. As a result, the cable company has not deployed any fiber in the city of Pittsburgh, and the telephone company does not encourage customers to use advanced technologies such as HDSL. If the cable company were selling data services with cable modems on a new cable plant, the telephone company would probably respond with HDSL-based services or something of equivalent economy and reliability. But in the absence of meaningful competition, both the telephone company and the cable company are chasing after customers who will pay premium prices for whatever services they buy. Thus there is a booming market in private fiber, but costs are very high.

b- Local regulation of the cable industry has resulted in fragmented services. While the city of Pittsburgh has no fiber from the local cable provider, the surrounding county has lots of fiber, although there is little in the way of new services on this fiber. One suspects that the cable companies find it easier to negotiate with the smaller municipalities and are able to finance their investment in new physical plant through rate increases in those municipalities. In the meantime other regions are starved out of services as part of the company's negotiating tactics for a new franchise agreement.

c- Ambiguities in tariffs are sometimes used to frighten customers away from economical services. The new residential ISDN tariff for our region contains an explicit prohibition on the use of ISDN voice calls for the transmission of data. This is an unenforceable provision, since ISDN voice calls and ISDN data calls are both streams of digital data. It's unclear to me why the state PUC allowed language of this sort, but it's clear that the intent is to discourage imaginative use of available services.

d- New competitors are likely to change the way in which old monopolies respond to new technology. One case in point is the availability of HDSL technology. Once there is unbundled access to copper in the local loop (the wires from the telephone company's central office to a customer's premises), then anyone will be able to sell services like HDSL over this plant. Another example is Centrex ISDN. Presently one can make untimed ISDN calls within a single Centrex, meaning that if you have several sites served by the same central office, you can make untimed calls between sites. But the whole landscape of telco central offices is an artifact of an ancient copper infrastructure. New competitors in the telephone business don't have multiple central offices; they have a single regional switching point with fiber running across the region to reach their customers. These new competitors can therefore offer Centrex ISDN across an entire county (and beyond). Once this happens the traditional telcos will petition state PUCs to allow them to extend their ISDN calling areas to a similarly large region. From the viewpoint of schools and libraries, it would be desirable for the state PUCs and the FCC to anticipate technology shifts of this type and help them to happen sooner rather than later. Otherwise schools and libraries will be saddled with expensive, obsolescent services for an unnecessary long period of time.

Bob Carlitz  
Project Director  
Common Knowledge: Pittsburgh

- 
- Next message: Jim Wiljanen: "Educational Networks in MI"
  - Previous message: John D. Gravelle: "The Power to Change"

# Educational Networks in MI

Jim Wiljanen ([wiljanen@mdenet.mde.state.mi.us](mailto:wiljanen@mdenet.mde.state.mi.us))

Mon, 23 Sep 1996 15:33:23 -0400

- **Messages sorted by:** [ [date](#) || [thread](#) || [subject](#) || [author](#) ]
  - **Next message:** [rmiller@mecn.mass.edu](mailto:rmiller@mecn.mass.edu): "Re: Welcome to Week Five of the US/ND On-line Seminar"
  - **Previous message:** [Bob Carlitz](#): "tricks of the trade"
- 

This message is something of a sidebar to the discussions this week, but Laurie Maak suggested that it might be of interest to some of the participants in the Universal Service seminar.

Last week, the Michigan Department of Education unveiled the 1996 update of its Inventory of Instructional Telecommunications Systems in Michigan. Four years had elapsed since the last edition, a hard-copy version published in 1992, and the tremendous amount of change in the education and telecommunications fields left that document terribly dated.

For the 1996 Inventory, there has been a significant evolution: The Inventory is not only the most complete collection of information available about educational video and data networks in Michigan, we also believe it is the first of its kind, prepared primarily for dissemination via the World Wide Web. It includes information on video and data networks managed or operated by local and intermediate school districts, community colleges, public universities, two- and four-year colleges, plus other entities administering networks that serve the educational market. Maps accompany some of the data fields, and more will be added in the weeks ahead. The Inventory also includes a glossary of telecommunications and distance learning terms, plus a list of various electronic distance learning resources. The URL is:

<http://www.mde.state.mi.us/reports/inventory/>

The updated Inventory is our attempt to make information that is constantly being sought by educators, government officials, policymakers and many others available in a format that will never be outdated again. Refinements will be made during the next couple of months. Comments are encouraged.

Jim Wiljanen

Jim Wiljanen  
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- **Next message:** [rmiller@mecn.mass.edu](mailto:rmiller@mecn.mass.edu): "Re: Welcome to Week Five of the US/ND On-line Seminar"
- **Previous message:** [Bob Carlitz](#): "tricks of the trade"

# Re: Welcome to Week Five of the US/ND On-line Seminar

*rmiller@mecn.mass.edu*

*Mon, 23 Sep 1996 16:48:41 -0400 (EDT)*

- **Messages sorted by:** [ date ] [ thread ] [ subject ] [ author ]
  - **Next message:** Jan Bolluyt: "ICN - Statewide fiber optics network"
  - **Previous message:** Jim Wiljanen: "Educational Networks in MI"
  - **Maybe in reply to:** Bob Carlitz: "Welcome to Week Five of the US/ND On-line Seminar"
- 

Bob-

Just another lurker... but before I go I'll share this with the group. I'm a fairly competent user of computers but I've begun to apply the "times four rule". Estimate the time it will take to accomplish a task (especially in setting up a network) then multiply by four.

Peace,

Ron Miller

*rmiller@mecn.mass.edu*

*rmiller100@aol.com*

"None of us is as smart as all of us."

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- **Next message:** Jan Bolluyt: "ICN - Statewide fiber optics network"
- **Previous message:** Jim Wiljanen: "Educational Networks in MI"
- **Maybe in reply to:** Bob Carlitz: "Welcome to Week Five of the US/ND On-line Seminar"

# ICN - Statewide fiber optics network

Jan Bolluyt ([jbolluyt@spirit-lake.k12.ia.us](mailto:jbolluyt@spirit-lake.k12.ia.us))  
Mon, 23 Sep 1996 21:10:46 -0500

- **Messages sorted by:** [ date || thread || subject || author ]
  - **Next message:** Bob Carlitz: "Re: ICN - Statewide fiber optics network"
  - **Previous message:** rmiller@mecn.mass.edu: "Re: Welcome to Week Five of the US/ND On-line Seminar"
  - **Next in thread:** Bob Carlitz: "Re: ICN - Statewide fiber optics network"
- 

I can't claim any responsibility, but I am pleased with the state of Iowa's fiber optic network. With the completion of phase three, each school in Iowa will be connected to the fiber optics backbone through out the state. That with a state wide technology funding program has made it possible for us to move ahead with the funding and expertise to complete our own intranet, LAN, WAN and Internet connection. We have much to do in the area of rates, usage, band width, etc. but a framework has been established. Universal Service could possibly pass us by until all districts and libraries have some sort of access. I, like many of you, have stated that increased bureaucracy would not be very welcome. Encouraging support among people like you, however, is more than welcome. Fiber optics may not be the link of the future, but Iowans now have the connection to grow with the technology and information juggernaut. A wish and a prayer that we are headed where our students can grow to become like you, constant learners. Thanks.

Jan

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- **Next message:** Bob Carlitz: "Re: ICN - Statewide fiber optics network"
- **Previous message:** rmiller@mecn.mass.edu: "Re: Welcome to Week Five of the US/ND On-line Seminar"
- **Next in thread:** Bob Carlitz: "Re: ICN - Statewide fiber optics network"

# Re: ICN - Statewide fiber optics network

Bob Carlitz ([bob@info-ren.pitt.edu](mailto:bob@info-ren.pitt.edu))

Tue, 24 Sep 1996 09:22:12 -0400 (EDT)

- **Messages sorted by:** [ [date](#) || [thread](#) || [subject](#) || [author](#) ]
  - **Next message:** [Robert Mammel: "Re: ICN - Statewide fiber optics network"](#)
  - **Previous message:** [Jan Bolluyt: "ICN - Statewide fiber optics network"](#)
  - **In reply to:** [Jan Bolluyt: "ICN - Statewide fiber optics network"](#)
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- 

Iowa's fiber optic network sounds like an important step for schools and libraries in the state. I'm curious about several aspects of this infrastructure:

1) How was it financed? Is it a state-owned network, or is the state the primary customer for a privately-built system?

2) What will be the price of connectivity to this network? I know of some state and local programs which have built fiber optic infrastructure but have attachment prices so high (on the order of \$50,000 annually) that few schools or libraries are able to make use of the facility.

3) To what extent has the state planned this system for shared use? That is, is it solely a school network, or is it a broader statewide information network?

4) Which other states have undertaken similar efforts, and how would the preceding questions be answered by people in those states?

Thanks,  
Bob

On Mon, 23 Sep 1996, Jan Bolluyt wrote:

> I can't claim any responsibility, but I am pleased with the state of Iowa's  
> fiber optic network. With the completion of phase three, each school in  
> Iowa will be connected to the fiber optics backbone through out the state.  
> That with a state wide technology funding program has made it possible for  
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> intranet, LAN, WAN and Internet connection. We have much to do in the area  
> of rates, usage, band width, etc. but a framework has been established.  
> Universal Service could possibly pass us by until all districts and  
> libraries have some sort of access. I, like many of you, have stated that  
> increased bureaucracy would not be very welcome. Encouraging support among  
> people like you, however, is more than welcome. Fiber optics may not be the  
> link of the future, but Iowans now have the connection to grow with the  
> technology and information juggernaut. A wish and a prayer that we are  
> headed where our students can grow to become like you, constant learners.  
> Thanks.  
>  
> Jan

- 
- **Next message:** [Robert Mammel: "Re: ICN - Statewide fiber optics network"](#)

- **Previous message:** Jan Bolluyt: "ICN - Statewide fiber optics network"
- **In reply to:** Jan Bolluyt: "ICN - Statewide fiber optics network"
- **Next in thread:** Robert Mammel: "Re: ICN - Statewide fiber optics network"

# Re: ICN - Statewide fiber optics network

Robert Mammel (*epcs@freeway.net*)

Tue, 24 Sep 1996 11:05:06 -0400

- **Messages sorted by:** [ date || thread || subject || author ]
  - **Next message:** St. Francis School: "Re: Week Four Assignments"
  - **Previous message:** Bob Carlitz: "Re: ICN - Statewide fiber optics network"
  - **Maybe in reply to:** Jan Bolluyt: "ICN - Statewide fiber optics network"
- 

> From: Bob Carlitz <bob@info-ren.pitt.edu>  
> To: Jan Bolluyt <jbolluyt@spirit-lake.k12.ia.us>  
> Cc: us-nd@info-ren.pitt.edu  
> Subject: Re: ICN - Statewide fiber optics network  
> Date: Tuesday, September 24, 1996 9:22 AM  
>  
> Iowa's fiber optic network sounds like an important step for schools and  
> libraries in the state. I'm curious about several aspects of this  
> infrastructure:  
> 1) How was it financed? Is it a state-owned network, or is the  
> state the primary customer for a privately-built system?  
> 2) What will be the price of connectivity to this network? I  
> know of some state and local programs which have built fiber optic  
> infrastructure but have attachment prices so high (on the order of  
> \$50,000 annually) that few schools or libraries are able to make use of  
> the facility.  
> 3) To what extent has the state planned this system for shared  
> use? That is, is it solely a school network, or is it a broader  
statewide  
> information network?  
> 4) Which other states have undertaken similar efforts, and how  
> would the preceding questions be answered by people in those states?  
>  
> Thanks,  
> Bob

I think these are relevant questions, but it prompts some additional ones.

5) Is the network designed to be used by schools and libraries eligible for the Telecommunications Act Universal Service subsidy? Does the Telecommunications Act ban on re-sale make the network ineligible?

6) How does the cost of the service compare to the cost of service offered by local ISP's? How does the performance compare?

7) What is the term of the contract offered to school districts and libraries and how does this term compare to the term offered by local ISP's? (Our brief Internet history shows that both technology and pricing changes quickly - what looks like a good deal on the day of purchase may be the worst deal available a year later).

8) Does the state wide network offer consulting, training, installation, storage on a Web server, virtual Web servers, access to a UseNet server, email accounts, the option to manage the library's or school district's own email accounts and dial in modem or ISDN access for individuals employed by or served by the library or school district?

9) If the school district, library or owner (government agency or non-profit corporation) of the subsidized network is offering individual modem or ISDN dial in access to the Internet, what effect is this having on possible competitors for the service being offered? Are local ISPs able to compete against the subsidized service? Is the subsidized service the reason you have few or no local ISPs (and thus few or no local choices nor competitive pricing for these services)?

10) Does the infrastructure of the state wide network utilize private sector infrastructure already in place or does it duplicate the infrastructure? Is the existence of a public state wide infrastructure the reason why a private sector infrastructure doesn't exist or is slow to develop?

11) Does a free lunch really exist?

Bob Mammel  
Gaylord Michigan

- 
- **Next message: St. Francis School: "Re: Week Four Assignments"**
  - **Previous message: Bob Carlitz: "Re: ICN - Statewide fiber optics network"**
  - **Maybe in reply to: Jan Bolluyt: "ICN - Statewide fiber optics network"**

# Re: Week Four Assignments

St. Francis School ([stfrancis@ntr.net](mailto:stfrancis@ntr.net))

Tue, 24 Sep 1996 12:58:54 -0700

- **Messages sorted by:** [ date | thread | subject | author ]
  - **Next message:** St. Francis School: "Re: Week Four Assignments"
  - **Previous message:** Robert Mammel: "Re: ICN - Statewide fiber optics network"
- 

Kevin Conde wrote:

> The question asked for week four was "How can schools and libraries share  
> services with each other and with other community groups? How can these  
> activities be structured so as to foster competition among  
> telecommunications providers?"

I would also like to add, "How do independent schools and parochial schools fit into the picture?" Too often, I find them ignored with the attitude, "It was their (the parents) decision to send their children to private school. They have the money, let them pay." I feel that this is a short sighted view.

Comments please.

Diane Seagle  
Computer Specialist  
St. Francis School (not catholic)  
Goshen (near Louisville) Ky

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- **Next message:** St. Francis School: "Re: Week Four Assignments"
- **Previous message:** Robert Mammel: "Re: ICN - Statewide fiber optics network"

# Re: Week Four Assignments

St. Francis School ([stfrancis@ntr.net](mailto:stfrancis@ntr.net))

Tue, 24 Sep 1996 13:02:38 -0700

- **Messages sorted by:** [ date ] [ thread ] [ subject ] [ author ]
  - **Next message:** Kevin Conde: "Re: Week Four Assignments"
  - **Previous message:** St. Francis School: "Re: Week Four Assignments"
- 

Betty Dawn Hamilton wrote:

> On Mon, 16 Sep 1996, Kevin Conde wrote:

>

> > The question asked for week four was "How can schools and libraries share  
> > services with each other and with other community groups? How can these  
> > activities be structured so as to foster competition among  
> > telecommunications providers?"

Please consider the possibility of leveraging the school's technology back to the business community and the general community. We pay for our "special person" (A.K.A. yours truly) by offering classes after school and in the evenings. Ea also rent out our lab to businesses for offsite training on the weekends and in the Summer.

Where there is a will, there is a way.

Diane Seagle  
Computer Specialist  
St. Francis School  
Goshen, Ky

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- **Next message:** Kevin Conde: "Re: Week Four Assignments"
- **Previous message:** St. Francis School: "Re: Week Four Assignments"

# Re: Week Four Assignments

Kevin Conde ([KevinC@sutter.k12.ca.us](mailto:KevinC@sutter.k12.ca.us))

Tue, 24 Sep 1996 16:06:16 -0700

- **Messages sorted by:** [ date || thread || subject || author ]
- **Next message:** EricElert@aol.com: "Re: Week Four Assignments"
- **Previous message:** St. Francis School: "Re: Week Four Assignments"

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At 12:58 PM 9/24/96 -0700, St. Francis School wrote:

>Kevin Conde wrote:

>

>> The question asked for week four was "How can schools and libraries share  
>> services with each other and with other community groups? How can these  
>> activities be structured so as to foster competition among  
>> telecommunications providers?"

>

>I would also like to add, "How do independent schools and parochial  
>schools fit into the picture?" Too often, I find them ignored with the  
>attitude, "It was their (the parents) decision to send their children  
>to private school. They have the money, let them pay." I feel that this  
>is a short sighted view.

>

>Comments please.

>

>Diane Seagle

>Computer Specialist

>St. Francis School (not catholic)

>Goshen (near Louisville) Ky

>

A school is a school and a kid in need of an education is a kid in need of an education. All children need access to this technology. I think you would be shocked to find that your situation is not all that uncommon in public schools. Near by there is a large school district that shall remain nameless that has a very large population of students that come from below the poverty line. The district is not a rich district. The families within the district that are not below the poverty line are lower middle class at best. What has started to become an issue is that the schools in one area of the district are fairly well equipped with computers and networks. The rest of the schools are not. The "have" schools in this case are the schools with a lot of Chapter One money, and the "have nots" are the schools in the part of the district where the middle class taxpayers live. A lot of the parents that send their kids to schools that don't receive much Chapter One money are beginning to become enraged because their kids do not have access to modern computers and networks. They want to know why their kids don't have equal access to tax dollar supported high tech equipment. I don't have an answer for them.

Kevin Conde

Technology Coordinator

Sutter County Schools

916-822-5115, x 103, 916-822-5165 (fax)

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- **Next message: EricElert@aol.com: "Re: Week Four Assignments"**
- **Previous message: St. Francis School: "Re: Week Four Assignments"**