Education Telecommunications Council Notes
June 2, 2005

I. WELCOME AND INTRODUCTIONS
The June 2, 2005 meeting of the Education Telecommunications Council was held at Iowa Public Television and via various ICN sites. The following members were present at the meeting: Al Bode, ISEA; Jim Bodensteiner, Regents; Paul Bowers, IAICU; Dean Cook, SAI; Merv Cronbaugh, IACCT; Greg Davis, IASB; Tim Dose, SAI; Mary Gannon, IASB; Glenn Grove, AEA Boards; John Hartung, IAICU; Ellen Kabat Lensch, IACCT; Terry Rinehart, IPTV; Kay Runge, DE/Public Libraries; Cordell Jeppsen for Chet Rzonca, Regents; John O’Connell for Gail Sullivan, DE; and Mary Travillian, AEA Boards. David Montgomery, DE/CIANS; and Kathryn O'Shaughnessy, ISEA; were absent.

The following guests were also present at the meeting: Kathy Guilgot, RTC 1; Kitty Conover and Kathy Otis, RTC 3; Jan McNeil, RTC 5; Julie Thomas, RTC 6; Bob Chittenden, RTC 7; John Haack and Wendell Maakestad, RTC 10; Pat Thieben and Janelle Archer, RTC 11; Denise Norman, RTC 13; Cena Johnson, RTC 14; Linda Abel, RTC 15; Tami Fujinaka and John Gillispie, ICN; Judy Jones, State Library; Dave Burman, RTC Tech, Hawkeye Community College; and Kathy Borlin, Gwen Nagel, and Deb Fiscus, IPTV.

II. ISSUES
A. Approval of Scheduling Deadlines
The 2006 ICN educational video scheduling deadlines were approved as submitted with the following motion:

**MOTION 1**
Al Bode moved to accept and approve the 2006 ICN educational video scheduling deadlines as submitted. John Hartung seconded. All in favor. Motion passed.

B. Approval of RTC Funding Plan and Guidelines for FY 2006
Kathy Borlin provided an overview of the proposed RTC funding plan for FY 06. This plan is based upon the same funding formula as has been approved the past few years. The proposed plan was distributed to RTC chairs/coordinators and ETC members prior
to the meeting. Option 1 includes RTC funding for 475 sites. Option 2 adds 2 K-12 sites for a total of 477. Members approved RTC funding option 2 with the following motion:

**MOTION 2**
Mary Gannon moved to accept and approve the proposed RTC Funding Plan and Guidelines with Option 2 as submitted. Tim Dose seconded. All in favor. Motion passed.

C. **Recruitment of ETC Members for Review of RTC Plans**
Ellen asked ETC members to volunteer to review RTC plans as they are submitted to IPTV. As in the past, a representative is needed from K-12/AEAs, community colleges, and independent/regent institutions. Dean Cook volunteered to represent K-12/AEAs, Merv Cronbaugh will represent community colleges, and Jim Bodensteiner will represent independent/regent institutions.

D. **Recommendation to the ITTC for Educational Video Rates for FY 2007**
Following a discussion regarding educational video rates, members recommended that ICN educational video rates remain at current levels for FY07 and the following motion was made:

**MOTION 3**
Kay Runge moved to recommend to the ITTC that ICN educational video rates remain at the current levels for FY07. Merv Cronbaugh seconded. All in favor. Motion passed.

E. **Recommended Funding Request for RTC Support for FY 2007**
After a brief discussion concerning RTC funding for FY07, it was decided that a recommendation be forwarded to the ITTC to restore RTC funding to the original FY04 funding level and the following motion was made:

**MOTION 4**
Mary Gannon moved that the ETC recommend to the ITTC that RTC funding for FY07 be restored to the original FY04 funding level. Dean Cook seconded. All in favor. Motion passed.

Bruce McKee and John Haack will head up the group of RTC coordinators to write a letter of justification for the FY07 funding recommendation.

F. **Selection of Sub-Committee to Review Administrative Rules**
At the ETC meeting of February 18, 2005, members voted to change the number of ETC meetings per year from 4 meetings to 2, with a friendly amendment to hold 1 meeting per year with others as necessary. This change was brought to the attention of Ellen Kabat Lensch because it was in violation of the administrative rules that state the ETC council must meet at least twice annually. Before further discussion was involved, it was suggested that the motion made at the meeting on 2/18/05 be reconsidered.
Motion 5
Merv Cronbaugh moved to reconsider Motion #1 of 2/18/05 regarding changing the number of ETC meetings from 4 meetings to 2 with a friendly amendment to recommend 1 meeting per year and other meetings as necessary. Mary Travillian seconded.

Yea-15; Nay-1; Absent-2; Not voting-0; Motion to reconsider passed.

Following a brief discussion and the motion to reconsider noted above, the following motion was made:

Motion 6
Merv Cronbaugh moved that the ETC hold a minimum of 2 meetings per year. Mary Travillian seconded. All in favor. Motion passed.

A sub-committee was formed to review the administrative rules. Those who volunteered to serve are Mary Gannon, John Hartung, Merv Cronbaugh, Linda Abel, and Bob Chittenden. Work on this committee will be done via email and will not require face-to-face meetings. The sub-committee will prepare a recommendation for the ETC meeting in December.

G. Funding for Educational Classes Survey
The educational classes survey has been prepared over the years by Eastern Iowa Community College with funding provided by Star Schools. That funding has come to an end. Members discussed possible funding options to replace the nearly $4k no longer provided by Star Schools. It was recommended to approach the ITTC and John Gillispie for the funds needed to continue the survey. It was also suggested that this funding need could be included in the justification letter for RTC funding. Discussion followed.

H. Annual ETC Update to ITTC on June 16, 2005
Mary Gannon volunteered to provide the annual ETC update to the ITTC.

III. UPDATES
A. ICN Legislative Update
Tami Fujinaka gave an overview of the ICN legislative update. For the past three years the ICN has been looking at various ways to fund the ICN, especially the capitol assets portion of the budget without having to go to the legislature. At the end of session in 2004, the legislature passed a bill to sell the ICN which the Governor vetoed. Since then, the ICN has been working with the Governor’s office and legislators to find funding to keep the infrastructure intact without legislative funds. The debt service was paid off in March—another piece of the puzzle completed. Last year the ICN looked at a program that called for selling of the ICN assets, keeping the ICN business and services provided to users and sell the fiber located in rural Iowa so that private industry would have an option to use that for whatever business that they provide to their customers. That was definitely opposed by private industry.

Plan B called for the ICN to be able to find some other funding sources by: 1) selling services to private telecom providers, not to the end user but to another company so that
they could utilize either the ICN’s transport capabilities or the Internet and sell it to their providers. However, private industry saw this as expansion of ICN services and their goal is that the ICN should not be expanded in any way. The ICN was unable to get that to go through, although they did get some pieces of that.

To date, the Governor recommended a $1.7 million dollar restricted capitol fund appropriation which was passed and included in the infrastructure fund bill. (At the date of this meeting, the bill had not been signed as yet.) This appropriation would help to pay for some of the equipment replacements and would address some of the capitol assets needs that the ICN faces.

Also, the Part III appropriation of $2.7 million dollars was included in the infrastructure bill (the same amount as in years past). The ICN self sufficiency plan included the ability of Part III sites to be owned by the state. However, private industry is not in favor of this action. (The ICN could save money on leases if this were not the case.)

Homeland security and the private sector worked to put together very specific language that will allow them to use the ICN. The language allows that Homeland security will support agencies in cities and counties to be able to use the ICN for testing and in times of disaster.

The pieces of the self-sufficiency program that did not pass—ability to sell capacity to the private sector; remove some old language that required the ICN to do a five-year report; ability to eliminate committees and appoint committees as required; the capitol assets fund; and interest earned from the revolving fund will continue to go into the General fund rather than to the ICN.

Current ICN rate language allowed for operational costs only to be included in determining ICN rates. The language has been changed to allow all costs incurred by the ICN including depreciation to aid the ITTC in setting ICN rates.

B. ICN Update—John Gillispie
John Gillispie had not arrived for the meeting when this agenda item came up. He did arrive immediately following the adjournment of the ETC meeting and gave a presentation to those who were still on site. A verbatim of his presentation follows at the end of these notes.

C. Election of ETC Chair-Elect
Gail Sullivan will be the official ETC chair at the end of this meeting. A chair-elect was elected by the following motion:

MOTION 7
Other items of interest from members and guests:

Kay Runge informed members that the grand opening of the new Des Moines Public Library is scheduled for April 8, 2006.

John O’Connell informed members that HF 739 passed creating the Iowa Learning Technology Commission and pilot programs, and establishes a research triangle and clearinghouse providing for contingent effectiveness; the commission is made up of 2 voting members including 2 members appointed by president of the Senate, 1 appointed by the minority leader of the Senate, 2 appointed by the Speaker of the House, 1 appointed by the minority leader of the House, and the Chairman or designee of the State Board of Education. They are to develop and administer the Iowa Learning Technology pilot programs, develop an accurate assessment of the current status of technology in Iowa public schools, classrooms supported by reliable data—data collection and assessment shall include the number of computers and their corresponding use, the cost of hardware, support staff development, instructional staff, technology support staff, sources of funds to be used by school districts, technology budgets and inventory of technology-based K-12 curricula. It also states that they want to establish a research triangle defined by the three institutions of higher education under the board’s control, a clearinghouse with a purpose of sharing projects and results of K-12 educational technology initiatives occurring in Iowa school districts, AEsAs, CCs, and other higher ed institutes with the educational community within and outside of the State, with a $500,000 appropriation. Members are to be appointed by July 1, 2005.

Mary Gannon stated that the K-12 online learning policies are nearly completed. She will have Deb Fiscus forward them to members.

Ellen Kabat Lensch officially handed-off the Chair’s gavel to Gail Sullivan who was absent. John O’Connell accepted for Gail.

The June 2, 2005, meeting of the Education Telecommunications Council adjourned at 10:30 am. The next meeting of the ETC is December 15, 2005, at Iowa Public Television.
Addendum to ETC Notes for June 2, 2005

Verbatim presentation by John Gillispie

John Gillispie arrived just minutes following the adjournment of the ETC meeting and presented to those members still on-site. He distributed a document entitled “ICN Reorganization” to members.

Verbatim—

I really only have two topics to cover this morning. The first is the reorganization that I have announced out at the ICN. The primary drivers behind the reorganization are to move the ICN from a footing that has historically been instruction to operations. I’ve presented the time schedule and am actually a little ahead of where I wanted to be. I’ve sent out the written questions to 8 applicants for the deputy position. I’m about a day ahead of my planned schedule. Right now the interviews are scheduled for the 17th of June, by an interview panel which consists of Molly Anderson, Betsy Bransgard, and myself. We are in the process of also searching for telecommunications administrators, one for customer service and one for sales and marketing. I believe this puts the ICN on a much better footing for the future and prepares us for the inevitable changes that we are going to face as IP video and other issues become very real to us. It (the document) goes through and describes what the fundamental changes of the organization are and presents the new organization chart for your review. I have notified the two current deputies that their positions as currently classified are being eliminated as of July 1st and that they are welcome and encouraged to apply for open deputy positions. The current deputies are Mike Bacino and Kathy Williams. It really starts to allow us to formerly recognize what the major functions we have to have from a day-to-day operational perspective are. I’m really moving toward a matrixed organization from an operating perspective. And I believe in the long run that this will be the right change. It also reduces the cost of the operation in the network. So, I’m looking forward to the change. I’ve had fairly good response from the organization. There’s a lot a questions that aren’t answered yet and that is a normal part of any change process. So, any questions on that?

Okay, hearing none, the other topic is one I talked about the last time I was here, which was moving to IP video. We met with the info tech officers for the community colleges this week. I will be sending letters, probably toward the end of this month, to all interested video parties requesting their participation in the planning and the specification for what IP video should look like. The reality is that we’ve got some 150 IP video sites already on this network. They’re already out there. We are not getting the kind of performance the end users would like or the reliability. We’ve got to get to some specifications and standards to ensure inter-operability across all the video sites on the network. Our current video classrooms are 10-12 years old and they are starting to expire. They’re technologically being out-classed by a lot of the IP video stuff we are seeing happening. IP video really gives you an opportunity to change distance learning down at its fundamental level. Because it’s not any longer something that requires the
students to come to the education but more the education to come to the students. And that’s the reality of the future, that’s what students want. I’m not saying that all the issues are resolved out there in the state to allow anywhere, anytime, because we don’t have high speed Internet every place in the state in a reliable enough level yet to allow truly interactive IP video. I’ll give you a good example...there’s a school district who I will not name who was using IP video for their distance learning. Their local Telco had two T-1s to the Internet—that’s 3 mb in total...they couldn’t ever get it to work. Every time they’d go to start a class either they had delays, pixelization, no audio. It’s absolutely critical that for this next generation we get together and set the standard and say this is what education is going to look like, this is how streaming is going to be done, if we don’t set those standards as a group, what we are going to end up with is a very bifurcated environment and I’m very concerned that we are moving that direction, and participation of all interested parties is critical because if a student wants to sit at home and stream that class after hours they ought to be able to do that. If they want to participate live, they ought to be able to do that. If they want to go to a classroom, they ought to be able to do that. IP gives us that capability. We just have to make sure that the standardization is done now so that 2, 3, 4 years from now that we’re ready for the change. It’s already continuing to happen. We’re already starting to see different classes of equipment that accommodates standards, (and I’ll use that word loosely), differently. And the end result is challenges in getting this stuff to interoperate together. The great thing about a standard in the IP world is that everybody’s got one. The bad thing about IP video is that everybody’s got standards. What we’ve got to do is select a core set of standards that will allow people to choose their equipment but say at this level you must, you must be able to use these standards or you’re going to be an island—you’re not going to be able to interoperate. The inevitable is here and we want to make sure the ICN can accommodate that need. We’re seeing very, very good quality at about 716 kb on IP video—almost comparable to what you’re seeing out of the ATM network. The ATM network has done a good job—it has met the need. Education and distance learning has moved beyond that sit down, push to talk microphone. A great article in Newsweek last week about Maine where their educational community has got together and wired 80 small towns and basically there is a picture in the background of an IP video unit with a quad screen up on it, and three students sitting there. The thing I did find interesting was that there was clearly a proctor in the room. But, what does that look like? The only people who can define education of the future are you. You have to define that. Then once we’ve defined the education of the future then we can do the standards. So we want to start with what are the business requirements then move to the technical standards and then get agreement on those technical standards. We’re trying to touch everybody but it’s a challenge to get to everybody who is an interested party.

**Question:** John, I work in a K-12 school district...will you call us when you want our input or do we engage with you, or how do we get in the loop on this up front?

What I would hope is that I’m going to get this letter out. Right now, I think I’m up to a mailing list of about 90 different parties, but probably the best thing to do is for me to send it to all of the ETC members and then you distribute it out from there. And I expect that the first one is going to be a fairly big discussion. But I need leadership from the
ETC on the business requirements. I believe the ETC absolutely has to lead on the business requirements. The ICN can’t... I mean, that’s not our role. Our role is technical in nature and to accommodate your business needs into design solutions. So I need someone out of the ETC who says I will lead that effort to design those business needs for the future. So, clearly, you are a key component in this, as is the TIE group, as are the Coos at the community colleges and at the regents, and everywhere. We’ve got to get those people to play. But distance learning has got to lead. They have to.

Question: Is this different or is this in addition to the committee that was set up last time?

I requested that, but it never happened. I’m trying to kick start it by getting a letter out. Because I feel like the network is just falling farther and farther behind in educational...............to get the whole ETC together on that I think would be a challenge, but if I could work with a couple of members then they could become that communications pathway for me into the other members of the ETC. Obviously we want all the input we can get from the business requirement side. They seem to be varied...they’re many faceted...what people are looking for from the platform of the future.

Question: What exactly do you mean when you say you are looking for the educational community to provide you guidelines or whatever...what exactly are you looking for?

Will every class be available for streaming? How much content are you going to want to integrate into that, are you interested in creating a common platform for distance learning? And there are a lot of business decisions that aren’t really within the hands of the ICN. And to start with...the ICN...we do video and then the content was done surrounding that platform. And there were a lot of people engaged up front in the development of that platform. The platform was standardized so every classroom is the same. But education is changing in what it wants.

COMMENT: That is part of the deal—there is no standard anymore in education. Everybody is doing anything anymore and whatever...Going way back, the standard in education used to be like 1 credit hour, 15-16 contact hours. Right? You’re sitting in front of your professor, so 3 credits you’re in front of your professor 45-50 hours. Today with web delivery and integrated courses, all that’s gone. I mean it’s literally up to the instructor as to how they decide what a 2 credit, 3 credit hour class is. And I don’t know what the benchmarks are.

Well, you can understand where the ICN’s at then. Because what we are seeing is continuing video declines,

...because people are doing a lot more but just don’t....

And that’s fine. What we want to do is accommodate there. What I’m primarily concerned about right now is IP video. IP video—we’re getting very bifurcated and we’re getting islands out there. And what’s going to happen is if we let the islands
continue to proliferate, we’re going to have 15, 20 islands we’re trying to figure out how to get to interoperate across each other.

The network was built to create equity in education and I know that some of these are tough issues to wrestle with but I think that if we don’t wrestle with them that we going to find that the old classroom die a slow death, people are going to move to IP video. We’re going to have performance problems, okay? The way IP video is delivered today to the K-12 is through the AEAs. Can you imagine what’s going to happen to the AEA if we get 60 IP sessions going, we’re going to chew up every ounce of bandwidth they have and there will be no ability to move data. So the fundamental architecture has got to change if IP video is going to be successful on a reliable one on one basis.

**Question:** Who is going to explain the parameters of this to K-12?

*I’m not sure I understand the question?*

**Question:** Well, okay, I understand that the video classrooms are being used less—I see that in my monthly readings. What you are talking about is a scenario of endless possibilities, and that’s wonderful, but who is going to explain what those possibilities are to the K-12s? Will it come from their AEAs, will it come from the TIE group? Because they are going to have to know what’s out there on the menu, and yes, I know there’s going to be a lot of things on the menu, but how is it all going to come about, and how are they going to arrive at what they need?

*Well, the way this happened the first time is that education really led and said these are the capabilities we want in the classroom. And then the ICN was constructed to meet those needs. And the TIE was created to create and support that defined set of needs. That defined set of needs has changed. People don’t really want a push-to-talk mikes anymore. They want to deliver web content into the classroom, they want independent study. The fundamental question in my mind is where does the ICN fit into that and how do we accommodate that changing set of needs? This technology change isn’t going to stop, it’s just going to continue.*

**COMMENT:** What the ICN did was really continued on historical education, face-to-face education. It just meant that we could be face-to-face near here and I’m out 50-100 miles away. So the ICN didn’t really require the people philosophically change how they thought about delivery of education...it was simply delivered the same way. A lot of our courses are still done...we have somebody teaching on campus to 10 people and another 15 out in the state, they’re still done exactly the same way they were 30 years ago, except that you do push a button and see each other at a distance. So that is not where the philosophical change is. There really wasn’t a philosophical change there. But now the stuff you are talking about, the web delivery and so forth, this is big time change and I don’t know that higher education at least has really dealt with this. I mean, they just let instructors say, “I’m just going to do this class on the web,” or whatever, and Department of Ed and others say fine. They have absolutely no idea what is going on for content or how it meshes with what was delivered to a 15-18 hour on-site class. People can disagree if they want, but it is highly individualized as to what an instructor defines as the class.
COMMENT: To a small extent, the leap from the ICN classroom to IP to direct conferencing with a student, I teach online right now. That’s a small leap. What the larger leap is going to be is the 24-7 aspect that you are talking about. Being able to reach that student 24-7 when they don’t have that access from home, when they don’t have that high speed Internet, and that’s one critical link that’s lacking right now. But it’s only a small leap to go from that ICN classroom to the IP within a classroom day. The student is there, the bandwidth is there. But outside that classroom…and I have taught on a 24-7 with teaching students at night using I (eye?) Visit in order to be able to reach them on a 24-7 basis…it’s very effective. But that’s where the gap is right now, for K-12.

If all we do is agree upon a common IP standard, that will be a huge step in the right direction, and then if there are add-ons...If we were asked, “well what’s the IP standard platform that you recommend?” by a group of school districts...we don’t have one. It’s kind of proliferated outside of the realm of the ICN. And that’s okay...what I’m concerned about is inter-operability challenges in the future. And if we can get that core set of standards we would be better off.

Question: So what are you asking in your letter that you are sending out?

For participants on IP video standardization.

Question: When were you looking at trying to get that group together?

Probably July.

Question: Let’s say something to Gail...we could send out an email to the ETC to look for participants. When’s the letter going out?

I’m hoping to get it out in the next couple of weeks. Like everyone else, it’s on my list of things to do.

Question: Let me ask you a question...you were talking about the technology in most of the rooms now is about 12 years old or something like that. Have you found, and we just heard a rumor recently, that an ICN room had some kind of a break down and the local school district is not fixing it—it will be just shut down. Are you hearing much about that?

There’s onesy-twosies like that. That’s really the school district’s choice. One of the beauties of IP video is that it is no longer something you have to do in a fixed spot. Actually there is stuff one third the size of that that literally rolls very nicely, it’s got a pop-up LCD projector in it, pretty sweet stuff, built in an MCU. Teacher can start it all and don’t really need any participation from the ICN other than to make sure the bandwidth is there.

Question: So the better job we do of developing the standards, the faster the two-way video classroom becomes even more obsolete...and that’s what you’re trying to transform
at the ICN...you get out of the two-way video classroom business and you help us set standards for the IP video...

And we know we’ve got to bridge between the two worlds for a period of time. The question is how long. There will be some school districts who decide not to go this way.

COMMENT: Right now just trying to figure how to get those units through our firewalls is driving us crazy...and so any help we could get to help make those things work would be great.

That’s really why we need to get some standardization. That’s really what...you know...you pick up and move that video unit to a new building and they haven’t penetrated the firewall, you’re dead. And there stands the teacher saying I’m ready to teach and I can’t go. So, that standardization of the technical firewall is very critical...you know we’re all going to use a port, hacks(?), and everybody’s going to open that port up on their firewall. Then the next one is whether they have intrusion detection. Because sometimes video is looked at as an intrusion on a system and it shuts down there. It just goes on and on in the IP world—stuff that technically the ICN solved by having a dedicated classroom. But it’s very clear to us that education doesn’t really want that dedicated classroom. They would rather use that space for other things and that’s why the IP is proliferated. And we are all for that, we just want to support it, make sure is performs well. Cause we can isolate the data traffic from the video traffic so that we can say yes, when you want to run video it’s going to perform well, it’s going to connect, it’s going to stay up. That’s one of the problems—mid-session, it just goes down. We can solve that problem if we do it technically now. If we wait 2 or 3 years it will be very, very difficult to undo a lot of that.

Question: Are you talking about managed megabyte type?

Yes, manage the alliant services. And we’ve tested it, but ran into firewall issues when they moved the cart to another building.

COMMENT: We are dealing with that this Friday. Phil’s going to present to us and we are going to try to do a test with 36 sites, using Tannenberg Solution as well as Polycom...both say they have solutions, plug and play.

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Multiple discussions between the members caused the recording to be garbled at this point, so was unable to transcribe the ending of John Gillispie’s presentation.

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