Utah Education Network

U TAH E DUCATION N ETWORK
S TEERING C OMMITTEE

A G E N D A

OCTOBER 18, 2002 – 9:00AM

9:00 am -
12:00pm

Steering Committee Meeting

Welcome and Introductions...................................... Gary Wixom

Recognition of Ed Ridges

Executive Committee

Technical Services Committee

Instructional Services Committee

Steering Committee C

Next meeting - December 13, 2002 (Proposed)

Please place these materials in your Steering Committee Binder

TAB **10**

FY 2004 BUDGET REQUEST

Issue

The FY 2004 Budget Request requires approval by the UEN Steering Committee. Initial ideas developed by UEN staff have been reviewed by the Executive Committee during a conference call on September 11, and by the State Board of Regents at its budget hearings on September 13. Because the deadline for submission of preliminary budget requests to the Governor's Office of Policy and Budget (GOPB) was September 30, the following requests have also been submitted to GOPB.

Background

We recognize that current economic conditions in the state dictate that budget increases next year will be very limited or perhaps non-existent. Because of this, only the most critical requests have been identified by the Staff of UEN for recommendation to the Steering Committee and possible consideration of the Governor and Legislature.

Major FY 2004 Budget Issues

Issue 1: Protecting Network reliability and capacity

The most critical asset of UEN, and an essential resource for both higher education and public education is the Network. Nearly half of the routers and switches that manage network traffic have already reached or will soon reach their end of life. Since its establishment in 1995, network traffic has doubled every 18 months. As an example of the current growth of network demand, since classes started this Fall Term, network traffic has frequently been so heavy that Internet traffic has sometimes dropped to speeds more than five times slower than normal. Further, because of under-funding, the Network has never had the reliability that current mission-critical applications require.

UEN urges state level decision-makers to protect the Network as a critical educational asset by providing UEN with sufficient funds to avoid equipment obsolescence, preserve adequate capacity, and assure its reliability. The most urgent challenges are as follows:

- An increase in state funding of $360,000, leveraged with approximately $650,000 in Federal E-Rate reimbursements, will be essential in FY 2004 as part

of a multi-year effort to protect the present investment in network infrastructure and to address obsolescence, capacity, and reliability issues.

- The statewide EDNET system must be upgraded from an outdated analog environment to digital capability, or it will become obsolete. To make that transition, an investment of $120,000 is urgently needed next year.

- The viability of UEN web resources are being threatened by a lack of server capacity and the need to make upgrades to several essential applications. Funding of $140,000 is needed to maintain current web capabilities.

Issue 2: O and M for the Eccles Broadcast Center expansion

The Eccles Broadcast Center, on the campus of the University of Utah, is the headquarters of UEN. A legislatively-approved expansion project was completed last November, but increased O & M costs have not been funded. The increased cost of O&M for the Eccles Broadcast Center is $160,000, which should be funded in the FY 2004 budget.

Issue 3: Salary increases and staffing shortages

A modest salary increase for current employees is the top priority of UEN. However, we recognize that the decision to either fund a salary increase or not will be made at a statewide level by the Governor and Legislative Leadership. We are not including a request for salary increases in our budget recommendations, but anticipate that issue will be addressed later.

Budget cuts at UEN last year forced elimination of ten full-time staff positions, which is 11 percent of our total workforce. Before those cuts were made, an independent review by an IT staffing expert determined that our Technical Services area needed 7 additional staff members. Five of the lost staff positions were technical positions, so our staff shortage in that area is now 12 FTE's. Of particular urgency are three positions in Engineering, Field Operations, and the Network Operations Center. We understand the difficulty of obtaining funding for new staff. However, it is important that state level decision-makers understand the impact that prior year budget cuts have had on our ability to provide staff support to maintain the Network and its essential services.

Table 1: Summary of Possible Budget Requests

Item	Estimated Cost
Protecting Network Reliability, Capacity	$620,000
EBC Expansion O & M	$160,000
Total	$780,000

Recommendation

It is recommended that the UEN Steering Committee approve the FY 2004 Budget Request totaling $780,000 for submission to the Governor and Legislature.

RATIFICATION OF INSTRUCTIONAL SERVICES AND EXECUTIVE COMMITTEE RECOMMENDATIONS FROM VIDEOSTREAMING RFP COMMITTEE

Issue

Over the past several months, a thirteen-person committee of representatives from public education has been convening to review and make recommendations on a digital media video library service. Two vendors responded to an RFP issued by the University of Utah Purchasing Department: Digital Curriculum and United Streaming. By a vote of 9 to 4, the committee has elected to award the RPF to Digital Curriculum. On September 27th, the UEN Instructional Services committee voted to support the recommendations of the RFP Evaluation Committee and select Digital Curriculum as the vendor. On September 29, a meeting of the UEN Executive Committee was held, and final vote to award the contract to Digital Curriculum was conducted, with all members voting in favor.

Background

Two regional service centers, two school districts, and many other teachers in Utah have engaged in a pilot test of the United Streaming digital video library delivered over the Internet during the last school year. As a result, an RFP was issued to determine vendor ability to provide service for an additional year. Two vendors responded to criteria developed and evaluated by an RFP committee. Laura Hunter served as chair of this committee in a non-voting capacity. Committee members included:

Michele Carlile, NUES; Rick Cline, UEN; Don Cressall, Davis District; Rick Gaisford, USOE; Robert Gordon, NUES; Dave Harlan, Nebo; James Hodges, UEN; Pat Lambrose, Salt Lake District; Georgia Loutensock, USOE; Dave Maw, UEN; Randy Scott, UEN; Denny Stock, USOE; Cory Stokes, SEDC

An evaluation matrix developed by the RFP committee, including remarks by committee members on the various criteria is attached. During a meeting on September 24, 2002, committee members reviewed "best and final" pricing from the two vendors and voted to award the RFP to Digital Curriculum. After a decision that both vendors provided adequate service, the majority of committee members voted for Digital Curriculum due to the difference in cost.

In addition, committee members developed some recommendations to be forwarded to the newly forming Digital Media Strategic Planning Committee. These recommendations are listed below.

1 Review vendor responses to Part 3 of the "best and final" addendum regarding locally licensed content to better understand pricing structures and options for encoding, indexing, hosting, and delivering digital content licensed locally.

2 Explore options for delivering digital media content over Internet 2, including E-rate fundable options, licensing, etc.

3 Develop ongoing funding models for this service.

4 Explore options for delivering digital media content over Digital TV, including investments already made in digital transmitters and pilot-tests being conducted by KUED and KULC.

5 Explore options for delivering digital media content over H.323 videoconferencing systems, including investments already made and research being conducted by UEN and local sites.

6 Conduct an analysis to explore the cost-benefit of delivering this digital video through a subscription service or developing a Utah service.

7 Explore the possibility of offering a hybrid subscription and locally licensed content service that includes national user interface, and locally licensed and hosted content.

8 Explore additional issues, equipment needs, and planning that deal with video on demand.

9 Address materials correlation to the Utah core curriculum.

10 Conduct thorough evaluation of current and new services and options concerning digital video delivery.

11 Include teacher professional development and technical training in future plans.

Recommendation

It is the recommended that the Steering Committee ratify the Executive Committee's actions and approve Digital Curriculum as the vendor to provide video streaming services during the remainder of FY 2002 - 2003.

FILE SHARING POLICY

Issue

The issue of file sharing and the impact upon network resources continues to be a significant concern. Peer-to-peer file sharing often involves activities which are in violation of federal copyright law and/or consume relatively large amounts of network resources in recreational activities which may preclude more vital or even mission critical applications from receiving adequate resources.

Background

As noted in previous Steering Committee meetings, a draft policy has been prepared and has been on the agenda of the Technical Services Subcommittee. Although it seems to be almost unanimously recognized that there is a serious problem that requires a logical and reasonable solution, the language to reach those objectives is still under consideration. Specific concerns have been raised regarding how the policy might obligate or expose institutions to legal liabilities associated with illegal activities which might be occurring utilizing network/institutional resources.

It was suggested that legal advice be obtained to assure that the policy did not unduly obligate or expose institutions to inappropriate liabilities under the law.

Policy Considerations

As the utilization of networks and network technologies continues to increase exponentially, there are some very difficult challenges associated with such an ubiquitous, robust, and powerful resource. Abuses are common and can run the gamut from innocuous nuisances to very serious violations of copyright, privacy, and misappropriation of services, resources, and/or funds.

One notable example of network usage that has now reached a point of significant concern is what is classified as 'recreational/personal use'. Because virtually any information or data that can be digitized is available via the Internet, enterprising individuals have found ways to access the data and download it to their computers. Most of them use software that is grouped into the category of 'file sharing'. Among the file sharing software options is a set known as 'peer-to-peer' (p2p) software. This software allows an individual to download information from any other computer any where in the world which is also running p2p software; and permits anyone else any where in the world to download any information from that individual's computer as well.

Although there are very legitimate reasons to share data and information using a p2p environment, most of the information that is being shared using p2p facilities is 'recreational/personal'. The problem is, as this network of users grows and the amount of bandwidth that is being used expands, network facilities which are intended for other more important and legitimate uses become 'clogged'. Participation by all entities with the provisions and intent of this policy will help ensure that network's facilities will not suffer degradation resulting from inappropriate activities associated with the uses specified above.

Issues and Considerations

There are several considerations which must be addressed in examining this problem and potential solutions:

1 The Utah Education's Network's (Network) resources are funded by the Legislature for the purpose of providing support to the educational process.

2 The Legislature may not be able to provide sufficient funds to continue to meet the escalating need for additional capacity as was the case in FY 2003.

3 Much of the recreational use of the network is apparently related to, or involves copyright violations.

4 Traffic volumes associated with recreational use of the network have reached the level where it is necessary to address reasonable, equitable, responsible, and acceptable solutions.

5 Acceptable Use Policies must be the foundation for any long-term solution to be viable.

6 Public and higher education have somewhat different issues related to network use and standards.

7 There are at least four different network traffic types: Mission Critical, Educational/Informational, Research and Development, and Recreational/ Personal. It may become necessary to prioritize network traffic according to these categories.

8 As noted, there are legitimate file sharing applications, however, a survey of all academic and administrative leadership on the University of Utah campus failed to identify a single valid or legitimate use of peer-to-peer file sharing software.

9 The implication is that peer-to-peer file sharing facilities within the network service only recreational/personal uses.

10 Under the Digital Millennium Copyright Act (DMCA) and Electronic Theft Act, network providers can be judged as complicit if they knowingly permit copyright violations to be facilitated by their network resources.

Additionally, it is important to note that the Network has an Acceptable Use Policy (AUP) related to public education, and that each of the school districts also have adopted an AUP which governs the use of the network by their students, teachers, administrators, and staff.

However, this is not the case with higher education. Because institutions of higher education value a significant level of academic freedom, there is a substantial level of reticence for those institutions to adopt stringent policies restricting the access to or use of information. However, most of the institutions do have policies related to the violation of copyright provisions in the law; and the excessive use of facilities for activities not associated with the mission of the institution and/or the relatively direct pursuit of an education.

Solution Strategies

As noted, technical solutions can be implemented to restrict traffic via specific channels or ports that are most commonly used by present file sharing software. This is a very temporary solution at best because the channel/port designation can be easily modified as a 'work-around'. There are other technical options which permit the 'rationing' or 'limiting' of bandwidth to particular entities or locales (e.g., dorms, etc.).

Included under this tab is a copy of a modified policy statement including language recommended by legal counsel. Additionally, other recommended modifications which specifically address statements which previously indicated a requirement (will) have been changed to statements which permit more flexibility (may) have been included for review.

This draft will be presented to the Technical Services Subcommittee for their review and action in their 10/10/02 meeting.The Technical Services Subcommittee will report top the Steering Committee their recommendation to approve or continue review of the policy.

Recommendation

It is recommended that the Steering Committee adopt the recommendation of the Technical Services Subcommittee.

TAB 12 ATTACHMENT A

FILE SHARING AND MISAPPROPRIATION OF NETWORK RESOURCES POLICY

October 11, 2002

Policy Statement

It is the policy of the Utah Education Network that:

I. Each institution and school district/regional service center, as well as other entities which utilize the Network's publicly funded resources should:

   A adopt provisions within their institutional Acceptable Use Policy standards which:

      1 identify misappropriation of resources (i.e., excessive recreational, personal or commercial uses) as uses not consistent with those purposes identified as 'acceptable use',

      2 specify as 'unacceptable use' the use of file sharing software for the purpose of acquiring or sharing copyrighted material(s) in violation of the copyright owner's rights and privileges;

   B ~~Document~~ monitoring procedures, ~~wherein~~ possible, the portions of the network for which they have direct responsibility ~~might be monitored~~ for traffic types (e.g., file sharing ~~wherein~~ in which copyright violations are evident, excessive recreational/personal, etc.) and volumes which would directly impinge upon appropriate and legitimate traffic;

   C ~~Identify~~ take appropriate actions to resolve problems identified above. These actions should include, but not necessarily be limited to:

      1 notification to users violating copyright provisions or who are using excessive network resources;

      2 where continued abuses or copyright violations persist, network access should be disabled;

      3 in some instances, it may be necessary to 'rate-limit' the traffic volumes to groups of users (e.g., dorms, etc.) where substantial violations are occurring;

      4 identify/register server sites for which legitimate peer-to-peer file sharing has been recognized.

II. UEN ~~will~~ may monitor the backbone traffic for security violations and for high volume uses which might imply excessive and inappropriate consumption of network resources, and will notify the institution and/or agency responsible for the user from which the traffic is originating;

III. UEN ~~will~~ may monitor the network's backbone for 'excessive' file sharing traffic and will provide notification to the institution and/or agency responsible for the users from which the traffic is originating;

IV. UEN will work cooperatively with the Network's institutional users to assure that network resources are utilized for the purposes for which they have been funded, and will assist institutions, and/or school district/regional service centers in implementing reasonable, equitable, responsible, and acceptable courses of action wherein persistent and/or egregious uses are identified. These courses of action may include, but are not limited to those defined in I-C above;

V. In order to preserve network reliability, security, viability, and/or stability, the Utah Education Network may be required to take certain actions (e.g., blocking of specific servers, routers, or the IP addresses of specific user machines). These actions will be taken as a 'last resort' and only after sufficient notification to the offending user. Additionally, any action will also be in accordance with the Network Connection Policy and Network Operating Agreements; and, wherein necessary, as an official action of the Executive Committee of the Steering Committee. These actions will only impact the excessive recreational/personal uses and/or instances where copyright violations have been clearly identified. These actions will not in any way impinge upon nor impact the mission critical traffic of any institution.

UEN's duties and responsibilities under this policy shall be limited to those expressly set forth herein. UEN shall not be responsible, and denies it has any duty, to monitor, detect, notify, take action, or otherwise govern the use and/or misuse of the network resources, other than those duties and responsibilities, if any, expressly set forth in the policy.

TAB **13**

REGIONAL TECHNICAL SERVICES PRIOTIZATION

Issue

Discussion of the Subcommittee assignment to prioritize the Regional Priorities List.

Background

The Regional Priorities list was developed from discussions held during the March 2002 Technical Services retreat. This list was updated and presented in the August subcommittee meeting and at the full Steering Committee meeting held August 16, 2002.

The Subcommittee co-chair assigned UEN staff to further update the Regional Priorities document in preparation for the October meetings. The attached document is a result of that assignment.

Two columns were added. These are the first two columns of the new document titled "Project Account" and "Rank".

A second document is also provided at this time. This document has been developed to give an overview of suggested spending in the FY2003 Technical Services Special Project Account. Account codes have been established for each suggested expenditure.

The "Project Account" column correlates regional priorities to the Project Priorities document.

The "Rank" column is a forced prioritization. The interpretation of the priority numbers is as follow:

0 = Project is completed or substantially underway, no further funding is needed.

1 – 28 = Numerical prioritization of projects. Rows with the same numbers indicate dependent or similar projects.

77 = Projects that have been postponed. These will likely be addressed next year.

333 = Projects that need greater clarification and are likely outside the responsibility of UEN.

999= Projects that are deemed outside of UEN responsibility. These projects can be reconsidered at the request of the committee.

Recommendations

It is recommended that the Subcommittee review and discuss both documents provided. Priorities should be accepted or revised. The general overview of expenditures should also be discussed, revised as needed, and accepted.

The revised documents should be presented to the Steering Committee for further discussion and approval.

TAB 13 ATTACHMENT A

Regional Priorities

Project Account	Rank	Project	Region	Status	Goals (Y or N)	Goal Identity	Initial Connectivity	Reliability Equipment Replacement	Reliability Alternate Path	Increased Capacity	Planned Equipment Replacement	Security	Training	Optimize Network Resources
	0	Audio bridge upgrade	Statewide	Installed	Y	VII.3		B						
	0	CUES connectivity to Snow South	CUES	Completed	Y	DONE								X
	0	Diagnostic access to the routers (view Access Lists)	CUES	Completed	Y	CLAR								X
	0	DS-3 Upgrade and bandwidth management	SESC	Completed	Y	II.4				D				
	0	I2 Participation	SLCC	In Process	N	VIII.2								
	0	MGX equipment replacement	SLCC	In Process	Y	X.1		B						
	0	Migration to GigE connection with UEN	U of U	Completed	Y	DONE					D			
	0	Moving frontline router responsibility to districts	SLCC	In Process	Y	III.1								X
	0	NUES router upgrade	NUES	Completed	Y	DONE		B						
	0	Reengineer CEU Hub	SESC	Completed	Y	DONE		B						
	0	Re-engineer Weber District traffic.	DATC	Completed	N	DONE								X
	0	Repoint Morgan to NUES	NUES	Ordered Pending Qwest	Y	XI.1								X
	0	Security, Firewall implementation	CUES	HOLD	N	CLAR						X		
	0	The List	CUES	Completed	N	DONE		B						
	0	Training	SEDC	Ongoing	Y	XV.1							X	
	0	Tri-School Fiber Project	NUES	In Process	Y	II.2				D				
	0	Upgrade Ethernet card at NUES Office from 10 to 100 Meg.	NUES	Completed	Y	DONE					D			
3-1;3-2	1	Capitalize on E-rate Opportunities	Statewide	In Process										
Circuit	1	CVDS replacement	Statewide	Eng/Ops Planning	Y	I.5		B						
NA	2	Eskdale Connection	SEDC	In Process	Y	II.1	A							
11-Mar	2	GigE circuits for Vernal and Roosevelt	NUES	In Process	Y	II.2				D				
NA	3	CEU New Building and Hub Move	SESC	HOLD	N	II.10	A							
3-1; 3-8	4	Completion of Core ring	UVSC	Director	Y	I.1		B						
3-3;	5	H.323 Video	Statewide	Installed	Y	VII.2								X
3-3;	5	Mutlicast enable the UEN network	Statewide	Eng Planning	Y	VII.5								X
3-3;	5	QoS Pilot and implementation	Statewide	Eng Planning	Y	I.8								X
3-3;	5	Video Master Plan	Statewide	Director	Y	IV								X
3-4;	6	IP Telephony Project	SESC	HOLD	N	II.9								X
3-15; 3-17	6	VoIP gateway	SLCC	In Process	Y	VII.1								X
3-15; 3-18	6	VoIP Plan	Statewide	Director	Y	VII.1								X
P2003-5	7	Hub equipment redundancy at Snow South (SPARES)	CUES	HOLD	N	I.6		B						
P2003-5	7	Spares	CUES	HOLD	Y	I.6		B						
P2003-5	7	Spares	SEDC	HOLD	Y	I.6		B						
P2003-5	7	Spares, (Routers, Switches, Microwave radios)	Statewide	HOLD	Y	I.6		B						
NONE	8	Harden power at SLCC (Dave Devey).	SLCC	Completed	N	DONE		B						
3-1; 3-8; 3-16	9	Redundant equipment and location at UVSC	UVSC	Pending Core Ring	Y	I.1		B						
3-15	10	Box Elder Mini-hub	USU	In Process	Y	II.12		B						
3-15;	11	LAN/WAN performance diagnostic tools	UVSC	HOLD	Y	III.5		B						
Circuit	12	Capacity in the future (what should we do beyond 2 DS-3 links).	USU	Director	N	I.2					X			
Circuit; 3-15	13	Fix redundancy into WSU	DATC	Eng Planning	Y	I.3			C					
NONE	14	Backbone Redundancy	SEDC	HOLD	Y	I.2			C					
NONE	15	Redundant link (Alternate path)	USU	Director	Y	I.2			C					
NONE	16	Redundant Connectivity	NUES	HOLD	Y	I.2			C					
Circuit	17	Alternate paths from Granite, Murray, Salt Lake City and Jordan Districts	SLCC	Eng. Planning	Y	I.7			C					
NONE	18	Implement a split node with diverse termination on the lower campus	U of U	HOLD	Y	I.7			C					
Circuit	19	Millard DO Capacity Expansion	SEDC	Ops Planning	Y	II.6				D				
NONE	20	Alternate Routes into the region	CUES	Eng Planning	Y	I.2			C					
Circuit	21	Community Network links at Provo, Alpine and Nebo districts.	UVSC	In Process	Y	XII.4				D				
3-9;	22	CommIX point of presence at UVSC	UVSC	Eng. Planning	Y	XII.3				D				
3-10;	23	Security Resources	Statewide	IDS installation	Y	XIII.1						X		
3-2;	24	Router replacement	CUES	HOLD	Y	IV.1					X			
3-2;	24	Router Replacement	SLCC	HOLD	Y	IV.1					X			
3-2;	24	Router replacements	DATC	Completed DSD	Y	IV.1					X			
3-2;	24	Router replacements	USU	Director	Y	IV.1					X			
3-2;	24	Router Upgrades throughout the region (Emery)	SESC	In Process	Y	IV.1					X			
3-2;	24	Router Ugrades - NUES	NUES											
Circuit	25	Ethernet WAN	SEDC	In Process	Y	II.11								X
NONE	26	Tools	SEDC	HOLD	Y	III.5								X
3-7;	27	Clay Hills Microwave Site	SESC	HOLD	Y	V.1; II.3								X
NONE	28	Fiber/high speed links to SLCC satellite sites.	SLCC	HOLD	N	CLAR								X
Circuit	77	Data T-1 relocation at Granite, Salt Lake City and Jordan Districts	SLCC	In Process	Y	XI.1		B						
NA	77	More training needed from UEN.	USU	In Process	Y	XV.1							X	
NA	77	Move Internet OC-3 Connection to UVSC	UVSC	On Hold	Y	I.1			C					
Circuit	77	NUES DS-3	NUES	In Process	Y	II.13				D				
NA	77	Technical Training	CUES	Ongoing	Y	XV.1		B					X	
NA	77	Technical Training and cross training for hub support	UVSC	Ongoing	Y	XV.1		B						
NONE	333	Additional Personnel	SEDC	HOLD	N	CLAR								X
NONE	333	Data Warehousing	SEDC	HOLD	N	CLAR								X
NONE	999	Davis Elementary router migration	DATC	In Process	N	DONE					X			
NONE	999	Davis Ethernet Connections and Video Redesign	DATC	Completed	Y	DONE					D			
NONE	999	Dutch John Elementary connectivity	NUES	HOLD	N	CLAR	A							
NONE	999	Elementary Schools	SEDC	HOLD	N	CLAR								X
NONE	999	Internet Capacity	DATC	HOLD	N	I.2; I.3				D				
NONE	999	Involvement in online testing plans	Statewide	Ops Review	Y	III.3								
NONE	999	Layer Three Switches	SEDC	HOLD	N	CLAR					D			
NONE	999	LSR	SEDC	HOLD	N	CLAR								X
NONE	999	Routers for firewall implementation	UVSC	HOLD	Y	IV.1		B						

TAB 13 ATTACHMENT B

Code	Account Name	Budgeted Amount	Spent Amount	RFP Number(s)
P2003-1	Core Ring	140,000.00		
P2003-2	Router Replacement	300,000.00		
P2003-3	H.323 Equipment	50,000.00		
P2003-4	Carbon District IP Telephony Equipment	32,000.00		
P2003-5	Router & Switch Spares	50,000.00		
P2003-6	Microwave Spares	30,000.00		
P2003-7	CIB Matching Funds	25,000.00		
P2003-8	Core Ring Support Equipment	40,000.00		
P2003-9	Community Exchange Router (UVSC)	30,000.00		
P2003-10	Intrusion Detection Devices (Security)	35,000.00		
P2003-11	Uintah Basin Ethernet	50,000.00		
P2003-12	Grand County Wireless	6,000.00		
P2003-13	Lab and Research Network	30,000.00		
P2003-14	SE OC-3 Microwave	70,000.00		
P2003-15	Hub Support	50,000.00		
P2003-16	Engineering Support	30,000.00		
P2003-17	Director Projects (Reserve)	40,000.00		
Total		**1,008,000.00**		

T A B **14**

ITS/UEN MEMO OF UNDERSTANDING

Issue

A Memo of Understanding between Utah Education Network (UEN) and State of Utah Information Technology Services (ITS) has been adopted. It establishes a basis for cooperation between the two organizations.

Background

To the outsider, the technological responsibilities of UEN and ITS may seem very similar. However, experience has repeatedly demonstrated that the missions of these two entities are very different, thereby necessitating logical and physical separation. It is, however, incumbent upon these two entities to identify, where possible, opportunities which provide financial economies while not imposing upon each other's need for autonomy. To that end, a Memo of Understanding (MOU) has been developed and is being submitted for review by the Technical Services Sub-committee. This MOU is designed to foster cooperation between UEN and ITS through clearly identifying roles and responsibilities for both agencies when sharing space and or resources.

Report Objectives

- Report to Committee on III Mission Statement
- Report to Committee on IV Objective
- Report to Committee on the establishment of a Management Team consisting of (Dan Patterson and Jeff Egly)
- Report to Committee on the Managing Methodology, specifically the costs associated with ITS site management.

Recommendations

This MOU has been agreed to and signed by all necessary parties and is now in effect. This report is informational only.

TAB 14 ATTACHMENT A

MEMO OF UNDERSTANDING

Memorandum of Understanding

between the

State of Utah, Information Technology Services (ITS)

and the

University of Utah (UofU)

Rev 2.6

Sept. 9, 2002

I. PURPOSE

The University of Utah (UEN) and the State of Utah, ITS are entering into this MOU to set the framework for a partnership wherein we can share telecommunications facilities, networks, equipment, technical personnel, and other resources within the State of Utah to minimize duplication of efforts, expenditures, and to enhance intergovernmental agency cooperation.

II. BACKGROUND

A Historically, the UofU and the state have partnered together to create or modify many telecommunication sites. The contributions of both agencies are acknowledged in this MOU. It is the intent of this MOU to create a framework whereby ITS and the UofU can continue to work together in order to provide beneficial statewide infrastructures to the taxpayers of the state.

B Representatives of the UofU, and ITS have recognized a potential duplication of microwave networks, communication sites, towers etc. Historically, each agency built its own facilities primarily due to the differences in funding and the type of services provided to our prospective customers. In an effort to minimize cost it has been proposed that we work together, evaluate future needs, and design networks that can be shared by all. Working together toward common infrastructures will save taxpayer money by minimizing duplication of equipment and personnel.

C As the UofU stakeholders become increasingly dependent on the networks provided by the UofU, it has become evermore appropriate that measures be taken to ensure reliable delivery of the UofU's services in both distance learning and Internet access. The ITS microwave network is one method that could be utilized to provide effective redundancy for the UofU network.

D ITS has been converting analog microwave to digital over the past 10 years. ITS has been aggressive in the deployment of digital microwave throughout the State with respect to the needs of ITS and its customers. With Public Safety being a

prime customer of ITS, all systems have been designed to ensure reliability of the network by implementing protected microwave paths utilizing monitored hot standby equipment and space diversity where required. As a rule, the UofU has not required this reliability and has implemented non-protected microwave networks. ITS has incorporated a network management system that can be expanded to provide the UofU with this capability if so desired. This network management system includes site alarms for generators, temperature, batteries etc. as well as the microwave radio equipment.

E Providing duplicate microwave networks is cost prohibitive and limited by resources such as radio frequencies and manpower. A cost effective and efficient microwave system and other telecommunications networks can only be achieved by partnering at all levels and implementing new technologies on a shared basis as practical.

III. MISSION STATEMENT

A *We will be open and honest with our business partner and not make unilateral decisions without our partners input.*

B *We will work together to better utilize personnel, technology, and administrative resources.*

C *We will search for opportunities to reduce expenditures, eliminate redundant functions and pool resources where possible.*

D *Collectively, the UofU and ITS will provide timely, cost effective, and dependable services to our customers.*

IV. OBJECTIVE

The objective of this MOU is to identify a working relationship between the UofU and ITS such that existing sites on which we are co-located will be managed by ITS with the UofU's full participation and input on decisions which may affect the UofU's ability to deliver services to their customer agencies. This arrangement anticipates ITS will be responsible for all normal site maintenance activities. The UofU will be given at least 30 days notice of any major site changes such as, but not limited to: new building occupants, new RF equipment, and generally speaking any change. The goal is a working relationship which utilizes lots of common sense and sensitivity between agencies. Eventually, depending on technical requirements and respective missions, we may be able to move towards the process of evaluating individual agency needs and the design and implementation of a shared digital network that will include cost effective consolidation of networks and telecommunication facilities.

V. DEFINITIONS

A Telecommunication Facilities refers to computer rooms, communications closets, overhead/underground cable raceways, mountaintop buildings and towers, and other facilities as may become part of the system.

B Network refers to video, voice, data, fiber or microwave systems.

VI. THE COOPERATORS SHALL:

Establish a Telecommunications Planning Team (Team) within 30 days of execution of this MOU. The Team will consist of two representatives from each agency, (ITS and the UofU). The Director of ITS, and the Director of the Utah Education Network (UEN) shall assign the representatives.

The Team will provide the following:

A *Information* on present and future needs, projected costs, and cost/benefit analysis.

B *Management Suggestions* for implementation, maintenance, and sharing of the telecommunication networks and facilities. The joint participation will include, but not be limited to, such items as physical facilities management and network allocation. The Team will make recommendations to their respective agencies.

C *Planning Suggestions* that will address the following:

1 Responsibilities for the telecommunications network facilities and management.

2 Establish schedules and coordinate the installation, modifications, and updates of facilities, networks, and equipment.

3 Information regarding any current and new development, construction, installation, maintenance, replacement, and operating costs.

4 Establish the framework for the design, installation, and maintenance of the networks, equipment and sharing of technical expertise and through subsequent amendments to this MOU, provide technical personnel to work on networks and equipment as mutually agreed.

5 Establish security guidelines for the UofU and ITS to follow when accessing facilities and interfacing with each others networks.

VII. TERMS OF AGREEMENT

This agreement will become effective upon receipt of the last signature and will remain in force until terminated by mutual agreement by all participants upon six months written notice to the others of the intent to terminate. The terms of this agreement may be renegotiated, canceled, extended, or renewed. Any participant may propose changes to this agreement. Such changes will be in the form of an amendment and will become effective upon signature by all participants. Disputes will be resolved through joint decisions by the Director of ITS, and the UEN Director.

VIII. MANAGING METHODOLOGY

In the past, the UofU has worked with the State's Radio Shop to develop state owned facilities at the following sites: Asphalt Ridge, Bald Mesa, Cedar Mountain, Dutch John, Frisco Peak, Grizzly Ridge, Lake Mountain, and Logan Peak. Facilities not owned or managed by the state, such as county facilities, are excluded from this

agreement. Now managed by ITS, some of these sites contain infrastructures that were purchased by the UofU. As the site manager, ITS will work closely with the appropriate representative of the UofU to ensure that the future needs of all agencies will be protected on these sites, as well as any future sites that the UofU and ITS may develop in the future. The UofU will pay standard rates for cost recovery. In return, ITS will be the site manager and provide the following management services:

⋄ Electrical Utilities to Breaker Panel
⋄ Back-up Generator Power
⋄ Site Maintenance
⋄ Technical Drawings of Buildings, Towers and Properties
⋄ Lease and/or Permit Correspondence and Documentation
⋄ Road Maintenance
⋄ Grounding
⋄ Tower Lighting (where applicable)
⋄ Bug and Rodent Protection
⋄ Air Conditioning
⋄ Detailed Equipment Inventory
⋄ Frequency Use Database
⋄ Inter-modulation Studies (as needed)
⋄ Equipment Inventory

Major site improvements such as building expansion, tower expansion, etc. will be funded by the requiring agency and subsequent maintenance of the expansion will become the responsibility of ITS within the framework of the current rack space recovery rate. Such renovations, additions and expansions will be handled on a case-by-case basis with the UofU, ITS and other impacted agencies playing an active roll in identifying funds.

IX. SITE SPECIFIC CONSIDERATIONS

The intent of this MOU is to establish general working guidelines between the UofU and ITS at the 8 sites identified in Section VIII above. It is understood that there may be specific circumstances at one or more of these sites which will require individual site agreements to address these circumstances. These will be created when the issues are identified and will become part of this MOU.

X. SIGNATURES

_____   _____

Steve Fulling

Director, State of Utah   Director, Utah Education Network

Information Technology Services   Utah Education Network

_____   _____

Date   Date

TAB 14 ATTACHMENT B

EXHIBIT I

EXHIBIT I
to the Memorandum of Understanding **between ITS and the UofU** October 7, 2002

As per Section VIII of the Original Memorandum of Understanding, the following rack spaces and associated rack space recovery charges have been identified. These charges will be paid by the UofU to ITS, in return for management services as outlined in the MOU.

SITE	# OF RACKS	$100/Rack	TOTAL	
Asphalt Ridge	9	1	$900.00	
Bald Mesa	9	1	$900.00	
Cedar Mountain	14	1	$1,400.00	
Delle	0.5	1	$50.00	
Dutch John	5	1	$500.00	(2 Exempt racks as per amendment #1)
Frisco Peak	6	1	$600.00	
Grizzly Ridge	5	1	$500.00	
Lake Mountain	11	1	$1,100.00	
Logan Peak	5	1	$500.00	
Point of Mountain	1	1	$100.00	
Site Space Recovery Monthly Total			**$6,550.00**	

Customer Contact:
DAS ID:
Service Date: 1-Nov-02
SBA#:

TAB 14 ATTACHMENT C

AMENDMENT I

Amendment I

to the

Memorandum of Understanding

between the

State of Utah, Information Technology Services (ITS)

and the

University of Utah (UofU)

9/9/02

I. PURPOSE

At the time of the signing of the MOU, a single unresolved issue had yet to be addressed. There are currently two rack spaces at the Dutch John communications facility utilized by the UofU and Daggette County, for the purpose of translating television signals. The relationship between Daggette County and the UofU at this location has not yet been clearly defined, so the party responsible for these two rack spaces has yet to be identified.

II. SOLUTION

In order to expedite the MOU and good working relationship between the UofU and ITS, both agencies agree to set aside the issue of these two rack spaces. Until resolved at a later date, ITS will continue to sponsor the payment of these two rack space fees.

III. SIGNATURES

_____   _____

Steve Fulling

Director, State of Utah   Director, Utah Education Network

Information Technology Services   Utah Education Network

_____   _____

Date   Date

TAB **15**

MAJOR E-RATE PROJECTS UPDATE

Issue

The attached E-Rate Task List summarizes UEN Projects underway to foster statewide and district level technology planning and to increase E-Rate reimbursements throughout Utah.

Background

UEN has historically filed for and received reimbursements for core and last mile circuits. Our staff, working with district and telecommunications provider personnel are identifying additional opportunities to capitalize on available E-Rate funds. This report and attached task list is representative of the efforts made in the past eight months to meet that challenge.

Report Objectives

This report:

- present to the Committee UEN's efforts in improving internal coordination for E-Rate;

- efforts to work more closely with Service Providers, e.g. Qwest, South Central, Frontier, Manti, Central Utah, and others in developing new strategies and opportunities; and

- efforts to assist Districts in proper filings with the SLD.

Recommendations

This is an information item and does not require action.

TAB 15 ATTACHMENT A

People attending: Claire, Dan P., Mike, Jeff G., Charice, Louise, Lisa, Jim, Steve Germain (came with Jeff Grandia)   9-25-02

PROJECTS AFFECTING E-RATE	Responsible People	Completion Date	Comments
Core Ring Equipment	Pete Kruckenberg	10/30/2002	Louise, Pete, Lisa and others will meet Friday, October 4th to go over equipment with the goal of e-rating the project for year 6.
Year 5: Jordan DO, Granite DO, EBC NUES	Jim Stewart	10/30/2002	Need to coordinate with Qwest to e-rate all equipment. Louise needs to file Form 486s to confirm service start dates; Tony needs to e-mail her the information after ordering.
Jordan, Cache, Box Elder DO	Pete Kruckenberg	10/30/2002	Needs to coordinate with Qwest to e-rate all equipment
Optimize filing for E-rate year 6	E-rate team	10/30/02	Accting staff can assure current lines being billed will be e-rated.Technical staff needs to communicate anticipated growth for 7-01-03 through 6-30-04 (year 6) with Louise.
Year 6: RFB Backbone (replace CVDS)	Randy Scott	9/30/02	Randy will make sure RFP is filed with U of U purchasing.. Contract needs to be signed by 12-01-02 for services next Fis. Yr.
Year 6: RFB Hub to end site replacement H.323 will be addressed	Randy Scott	9/30/02	Randy will make sure RFP is filed with U of U purchasing.. Contract needs to be signed by 12-01-02 for services next Fis. Yr.
District Form 470 Filings	Louise / LSR's	10/30/02	Encourage school districts to file generic 470's based upon Dan Patterson's work with Iron School Dist.
Millard	Dan Patterson	9/30/02	All 470 forms have/are being filed. All 90% schools were identified.Contracts need to be negotiated and 471 filed. They found a Cisco Solution, moved to gigabit at a cost of $138,000 less 38% discount.
SEDC & CUES	Dan Patterson	9/30/02	All 470 forms have/are being filed. All 90% schools were identified.Contracts need to be negotiated and 471 filed.
Cache County		10/30/02	Finished ethernet services design
CUT, Manti Telephone Cos			
Emery Telecom			Solution for high cost DS3/OC3 from Price to Blanding
UBTA			Finished services
SLCC to UEN (AT&T provider)	Jim Stewart		Suggested this service might no longer be necessary.
OTHER COMMENTS:			Ultimate goal is to have Gigabit Ethernet service for all school districts. Qwest will provide bids to UEN for this service. Jeff Grandia commented that all services have to meet NEBS Compliance. This demonstrates that service meets a standard not necessarily achieve by other telcos. Beehive (Skyline, Central & Bear River) will be installing Gigabit. Dugway, Tintic, Wendover, Eskdale and Ipabah will benefit. Sites are selected by UEN, based upon lack of service, reliability of service(equipment;H.323), and capacity.

TAB 16

INSTRUCTIONAL SERVICES COMMITTEE REPORT

Issue

The Instructional Services committee met on Friday, September 27. Vicky Dahn conducted the meeting. The committee voted on two agenda items to be moved forward to the full Steering Committee:

1 Instructional Services and Instructional Delivery FY2003 strategic plans

2 Formation of a Digital Media Strategic Planning committee

In addition, the Instructional Services committee held a closed executive session to discuss the Digital Media Streaming RFP. Outlining the actions of the RFP evaluation committee and subsequent recommendations for awarding a contract were presented to the Executive Committee and their actions are reported in Tab 11.

Recommendation

It is recommended that the Steering Committee review the minutes of the Instructional Services Committee meeting of September 27. Final action is required on the Instructional Services and Instructional Delivery FY2003 strategic plans, and on UEN participation in a Digital Media Strategic Planning Committee.

TAB 16 ITEM 1

INSTRUCTIONAL SERVICES COMMITTEE MEETING MINUTES

Instructional Services Committee Meeting

Delores Doré Eccles Broadcast Center Dumke Conference Room

September 27, 2002

Attendees: Vicky Dahn, David Eisler, Reed Eborn, Brent Goodfellow, Laura Hunter, Pat Lambrose, Mike Petersen, Glen Taylor, Carlene Walker

Apologies: Clif Drew, Amy Owens, Kirk Sitterud

Guests: Rick Gaisford, Cyd Grua, Coy Ison, Cody Spendlove, Claire Gardner, Cory Stokes, Dennis Sampson, Rich Finlinson, Rick Cline, Karen Krier, Renee Willemsen, Doug Jones, Becky Sowards

1. Public Education Subcommittee Report – Rick Gaisford

Rick reviewed the minutes and recommendations of the Public Education Content Committee Meetings held August 9 and August 30. These can be referenced on page 8 at www.uen.org/steering/iss/index.html

ACTION: Vicky Dahn made wording changes under POLICY RECOMMENDATIONS in order to stay within the guidelines established by the Instructional Services Committee: "All new products, initiatives, partnerships, services, etc. should be initiated after input and feedback from the Public Education Content Committee is received.

ACTION: Vicky Dahn will work with Bonnie Morgan to assist with the expanded representation of the PE Subcommittee members as recommended.

2. Higher Education Subcommittee Report – Cyd Grua

Cyd reviewed charges and activities of the Higher Education Subcommittee which can be referenced on page 13 of www.uen.org/steering/iss/index.html.

Recommendations included extending Course Proposal Process Round One deadlines to January, bringing training tools and video demos to the next evaluation

meeting in November, and changing language in the UEN IS strategic plan to represent Higher Ed as well as Public Ed (i.e. faculty vs. teacher). The purpose of this is to dispel misconceptions that UEN primarily serves public education and minimally serves higher education. Cyd pointed out that Laura Hunter has incorporated the committee's language changes into the plan. Vicky Dahn emphasized that it is Higher Ed that educates our teachers in their Department of Education and Colleges of Education, so it is important to keep a high awareness of their partnership and involvement.

ACTION: Vicky Dahn suggested that George Miller attend these meetings since they involve concurrent enrollment.

3. Instructional Services/Instructional Delivery FY 2003 Plan – Laura Hunter

Vicky Dahn and Pat Lambrose requested that budget figures and funding amounts be included for specific projects in the plan outline, for example, OnCourse activities. Laura responded that in many cases it is difficult to separate out costs. Grant monies also fund many projects. OnCourse does not have a budget in this fiscal year. One year ago, KUED and UEN split the initial cost at $25,000 each. Currently KUED and UEN are participating in beta testing only.

ACTION: Pat Lambrose requested specific wording changes to the Instructional Support Services Strategic Plan:
- ◊ **Goal I, #2, #3 List specific online resources since UEN does not correlate ALL online resources.**
- ◊ **Goal II, #1 Expand access to digital media by working with the Digital Media Strategic Planning Committee.**
- ◊ **Goal IV, #1 Add C-Forum**
- ◊ **Goal IV, #2, #3 Replace UEN developed with "best practice" and add "providing workshops on Edesk and TIPS."**

ACTION: Changes requested to the Instructional Delivery Services Strategic Plan:
- ◊ **Goal I, #1 Project Leader is now Mike Petersen instead of Steve Hess.**
- ◊ **Goal I, #3, #2 Replace ATC with UCAT per David Eisler.**
- ◊ **Goal I, #7 Explain acronyms such as Cme or Conference Management Environment Software Tool for non-UEN members.**
- ◊ **Goal III, #1, #1 Assist Higher Ed since ATC's are included in Higher Education.**
- ◊ **Goal IV, #3, #2 Assist Higher Ed with assessment of economic development impacts in local communities.**

Laura Hunter commented that the suggested changes to include additional workshops needs to be discussed further since UEN has a limited training staff and this plan was developed in May 2002 before the introduction of Edesk. Cyd agreed that the term, "best practices" is a better choice overall from a higher education perspective.

ACTION: **Vicky Dahn moved that the IS strategic plans move forward to the Steering Committee with the wording changes as noted above. The committee voted in favor.**

4. Utah Instructional Media Consortium – Glen Taylor

Glen Taylor provided an overview of the history and purpose of the UIMC and addressed the critical need for an approval process regarding digital rights and filtering of streamed video into Utah's public schools.

ACTION: **Glen Taylor and Vicky Dahn moved to recommend that a Digital Media Strategic Planning Committee be formed. The committee voted unanimously in favor to forward this motion to the Steering Committee.**

5. My EDesk Demonstration and Status Report – Cody Spendlove, Karen Krier

Cody gave a review of the history and features of My EDesk and the possible ways that UEN can integrate with My EDesk. Karen Krier and UEN's web team will research setting up a single login for users, as well as any security issues this may present.

6. FY2003 Meeting Schedule

A correction was made to the proposed IS / Steering Committee meeting schedule: February 8 (Saturday) was changed to February 7, (Friday). Schedule was approved.

7. Future Topics

H.323 Videoconferencing System and KULC Update and Digital Television will be put on the next meeting's agenda. These items were not discussed due to time constraints.

The next Instructional Services Committee meeting will be held
November 15, 2002.

Minutes recorded by Becky Sowards.

TAB 16 ITEM 2

Instructional Services Strategic Plan

With increased emphasis on student achievement and educator competency at the federal and state levels, educational resources available over UEN systems are critical to the end user. By coordinating and facilitating solutions to the needs of stakeholder groups, Instructional Services provides quality content resources and support services for both teaching and learning. Online web resources; utilizing the new digital capabilities of KULC; developing and improving partnerships with business, state agencies, and educational entities; and providing outstanding professional development opportunities will be addressed in FY 2003.

Q1 = July-September 2002
Q2 = October-December 2002
Q3 = January-March 2003
Q4 = April-June 2003

Goal I. Provide web-based resources and services that support UEN stakeholder needs.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Working with the Pioneer Library Committee, continue to support, deliver, and market Pioneer, Utah's Online Library. Funding: $470,000 Project Leader: Rick Cline	1. Collaborate with the committee to purchase the best electronic library resources at the best price. 2. Identify Pioneer promotion strategies statewide; implement statewide Pioneer promotional campaign through public and higher education and the public library system. 3. Determine what needs (technical, marketing, evaluation) exist in supporting Pioneer; develop and implement a plan to meet those needs.	1. Ongoing 2. Q2 3. Q1
2. Increase accessibility to curriculum resources. Funding: Project Leader: Karen Krier	1. Refine the Public Education Core Curriculum authoring and display interfaces on uen.org. 2. Design and implement an easier interface for accessing the curriculum resources. Target specific audiences (students, teachers, adult learners). 3. In collaboration with USOE specialists, catalog and correlate online resources (i.e. educational links, lesson plans,) that support the public education core curriculum. 4. Ensure all uen.org pages meet universal accessibility requirements. 5. Establish an annual review process for online projects and tools. Act on review. 6. Work with colleges and universities to gather college-level curriculum links. Include higher education resources on uen.org, searchable by higher education discipline.	1. Q2 2. Q3 3. Q4 4. Q2 5. Q3 6. Q4
3. Support new web applications as requested by stakeholder groups Funding: Project Leader: Karen Krier	1. Support activities of the electronic portfolio committee, determine available resources to fulfill committee priorities, participate in planning sessions. 2. Support development of online assessment tools and processes with USOE. 3. Expand web site to include resources for higher education distance education faculty. 4. Support SURWEB as a teacher/student	1. Q4 2. Q3 3. Q4 4. Ongoing

	multimedia authoring tool, TIPS as an online assessment tool and , and MyEDesk as an online teacher/student portfolio tool through collaborative planning, partial funding, and coordination of services to facilitate interoperability between MyEDesk and my.uen.	

Goal II. Increase the vitality and scope of KULC.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Participate with the Digital Media Strategic Planning Committee to expand access to digital media. Funding: Project Leader: Laura Hunter	1. Participate with the Digital Media Strategic Planning Committee in developing a digital video strategy for KULC, H.323, DTV, EDNET for public and higher education. 2. Establish 'Annenberg Channel' for high school, higher education, and teacher education programming; promote with stakeholders. 3. Distribute a library of streamed media content for K-12 and post-secondary general education programs. 4. Partner with colleges and school districts to facilitate demo projects with DTV and streamed media. 5. Maintain national partnership with OnCourse. 6. Develop internal UEN workflow models for digital service. 7. Facilitate public and higher education hybrid course development using digital media. 8. In coordination with KULC stakeholders, develop business plan for KULC.	1. Ongoing 2. Q2 3. Q3 4. Q3 5. Ongoing 6. Q3 7. Q4 8. Q4
2. Identify and act on growth opportunities for KULC programming in critical needs areas. Funding: Project Leader: Laura Hunter	1. Work with colleges and school districts to identify program gaps and expand service to these areas. 2. Support KUED projects where service audience and educational missions align. 3. Implement local productions with institutions, based on institution request. 4. Identify program sources for expanded service in the critical need areas identified by KULC stakeholders. 5. Identify and implement program-specific promotion strategies on behalf of districts and institutions. 6. Expand KULC website to include program search, translator and cable information.	1. Q3 2. Q1 3. Ongoing 4. Ongoing 5. Ongoing 6. Q2

Goal III. Support workforce and career development programs.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Increase partnerships with business, workforce, adult learning, applied technology,	1. Implement UEN internship program with DATC. 2. Participate in the Utah Association of Adult	1. Q1 2. Q1 and Q3

higher education, and career development stakeholders. Funding: Project Leader: Dennis Sampson	Continuing and Community Education (UAACCE) Board of Directors; support the UAACCE Annual Conference; sponsor technology-related sessions. 3. Support multimedia education and ATE and UCAT workforce development. 4. Participate in the Utah Information Technology Association (UITA) Skilled Workforce Subcommittee. 5. Participate in the U of U AOCE UACTION Grant (Utah's Access to Community Technology Integration Outreach Network). 6. Expand Internet2 to USHE and secondary schools.	3. Q1 4. Q1 and Q3 5. Ongoing 6. Ongoing
2. Administer Utah Tech CORPS for K-12 schools. Funding: $15,500 Project Leader: Dennis Sampson	1. Administer the Intel Utah PC Recycling Program. 2. Hire and support two AmeriCorps* VISTA interns. 3. Implement PC-to-TV classroom converter project for K-12 schools; design and administer post-project evaluation. 4. Secure additional funding sources and partnerships for the PC-to-TV Converter project.	1. Ongoing 2. Ongoing 3. Q4 4. Ongoing

Goal IV. Provide high quality, sustainable professional development programs.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Working with public education district and state curriculum specialists, C-Forum, and higher education stakeholders, develop a systemic approach for providing high quality, sustainable professional development programs and services. Funding: Project Leader: Victoria Rasmussen	1. Develop and implement professional development courses that address national technology integration goals for teachers and faculty. 2. Develop and deliver a web academy program for education web site administrators from both public and higher education. 3. Develop and deliver a technology integration program for K-12 teachers. 4. Implement models for existing UEN professional development offerings which utilize multiple delivery systems.	1. Q1 2. Q2 3. Q2 4. Ongoing
2. Increase the number of teachers and faculty served. Funding: Project Leader: Victoria Rasmussen	1. Increase number of field-based trainings at both school districts and colleges. 2. Support and promote UEN web resources to all stake holders. 3. Improve and expand workshops that present best practice tools on uen.org (e.g., rubric tool, lesson plan builder, etc.) and include Edesk and TIPS in workshops. 4. Increase service to higher education teacher education programs. 5. Work with USHE campus faculty assistance centers to identify training needs and provide	1. Ongoing 2. Ongoing 3. Q2 4. Ongoing 5. Ongoing

	such training as needed. 6. Conduct outreach efforts at conferences and workshops for public education school districts, USOE, higher education groups, and other educational and government organizations.	
3. Conduct activities of grant-funded programs in accordance with grant requirements and commitments. Funding: Project Leader: Renee Willemsen, Doug Jones	1. Complete Intel Teach to the Future project and plan expansion. 2. Implement PBS TeacherLine online professional development project. 3. Update and conduct 40 ITC workshops in school districts. 4. Increase utilization of MarcoPolo resources and professional development programs.	1. Ongoing 2. Q1 3. Q4 4. Ongoing

Instructional Delivery Services Strategic Plan
August 2002

The Utah Education Network has provided special delivery services from its inception. EDNET and later, Satellite Services have provided extensive educational opportunities for students especially in areas where student populations have not justified offering classes locally. The strategic direction for instructional delivery is to improve the delivery of courses to students to better meet their needs. To accomplish this, the EDNET and UEN Satellite systems will be to enhanced and improved, but with a look forward to new more flexible technologies such as H.323, a new standard of providing interactive video over the Internet, and to more and varied locations with greater flexibility. Instructional delivery will continue to look at ways in which instruction can be delivered more asynchronously with combined technologies such as courses delivered using the Internet and EDNET/satellite.

Goal I. Continue and improve the effectiveness and usefulness of EDNET.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Concurrent Enrollment Funding: UEN Budget Project Leader: Mike Petersen	1. Work with key stakeholders to assure financial viability of the program 2. Support increased cooperation between higher ed and public ed to improve effectiveness of the program for students in Utah high schools	1. Q1 - Q2 2. Q1 - Q4
2. Teacher Training Funding: Project Leader: Bill Kucera Project Leader: Claire Gardner, Rick Cline	1. Work with colleges of education and public school officials to develop and conduct needs Assessment 2. Assist public and higher ed to identify, develop programs for delivery on EDNET	1. Q1 - Q2 2. Q3 - Q4
3. UCAT Funding: UEN Budget Project Leader: Bill Kucera Project Leader: Claire Gardner	1. Work with UCAT officials to develop and conduct needs assessment 2. Assist UCAT to identify and develop programs for delivery on EDNET	1. Q1 - Q2 2. Q3 - Q4
4. New intra and Inter-district public ed courses Funding: UEN Budget Project Leader: Claire Gardner	1. Assist public ed staff at high schools and districts to identify and develop classes for delivery on EDNET	1. Q2 - Q4
5. New higher ed degree programs to be delivered on EDNET Funding: UEN Budget Project Leader: Rick Cline	1. Assist continuing ed. Deans to identify, develop, and implement new programs and classes for delivery on EDNET	1. Q1 - Q4
6. State government and non-profit educational programs Funding: UEN Budget Project Leader: Mike Petersen Project Leader: Claire Gardner	1. Identify appropriate staff at state government agencies and non-profit organizations who have educational training responsibilities 2. Assist state government and non-profit staff to identify, develoop, and implement programs and classes for delivery on EDNET	1. Q1 2. Q2 - Q4
7. Refine, Improve EDNET tools, resources Funding: UEN Budget Project Leader: James Hodges	1. Refine and improve EDNET web pages, web-based reports; Evaluate and upgrade end sites; improve UEN's Conference Management Environment software tool (Cme) and Remedy help desk software.	1. Q1 - Q4

Goal II. Evaluate and pilot-test new instructional delivery technologies through collaborative efforts with Technical Services and Instructional Support staff

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Lab and beta testing of new technologies Funding: Technical Services Budget Project Leader: James Hodges Funding: Technical Services Budget Project Leader: James Hodges Funding: UEN Budget Project Leader: James Hodges	1. Work with technical services staff to evaluate and test H.323 video conferencing equipment in a lab environment 2. Work with technical services staff to evaluate and test MPEG 2 based codecs 3. Work with Instructional Support and Technical Services staff to implement streamed media services for use by public and higher ed. teachers throughout the state.	1. Q1 - Q2 2. Q1 - Q2 3. Q1 - Q4

2. Initial piloting of instruction delivered with new technologies
  1. Funding: UEN Budget Project Leader: Mike Petersen
  2. Funding: UEN Budget Project Leader: Claire Gardner, Rick Cline
  3. Funding: UEN Budget Project Leader: James Hodges
	1. Assist public ed and higher ed officials to identify instructors and support their preparation of courses that could be delivered with the new technologies
	2. Pilot test in the field a small number of higher ed and public ed courses to be offered with new technologies
	3. Initiate evaluations of H.323 equipment as part of EDNET system (blending EDNET & H.323 in a single event)
		1. Q1 - Q3
		2. Q3 - Q4
		3. Q1 - Q4

Goal III. Continue and enhance the value and importance of UENSS as an instructional delivery system.

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. Cost Effectiveness Funding: UENSS Budget Project Leader: Rick Cline, Claire Gardner Funding: UENSS Budget Project Leader: Claire Gardner, Rick Cline, Bill Kucera	1. Assist Higher Ed to identify, develop, and implement new programs and classes for delivery on UENSS 2. Work with stakeholders to increase channel utilization, widen audiences, increase flexibility; thus increasing cost effectiveness	1. Q1 - Q4 2. Q1 - Q4
2. Quality instruction Funding: UENSS Budget Project Leader: Rick Cline, Claire Gardner	1. Work with instructors to improve instruction through training in instructional design and incorporation of new technologies	1. Q1 - Q4
3. Ease of access Funding: UENSS Budget Project Leader: Claire Gardner	1. Work on development of updated web pages for UENSS	1. Q3

Goal IV. Evaluate and plan for the future of UENSS

Objectives Funding, Lead Responsibility	Tasks	Completion Date
1. What should the system look like in 3-5 years? Funding: UENSS Budget	1. Work with stakeholders to create 3 realistic scenarios for the future of UENSS	1. Q1 - Q2

Project Leader: Mike Petersen, UENSS Future Committee		
2. Evaluation of alternatives to augment or replace satellite delivered instruction Funding: KULC, KUED, UEN Budgets Project Leader: James Hodges, Dave Devey	1. H.323 video conferencing 2. DTV 3. Satellite contract renewal	1. Q1 - Q2
3. Assess advantages of satellite delivery systems Funding: UENSS Budget Project Leader: Bill Kucera, Claire Gardner Funding: UENSS Budget Project Leader: Bill Kucera	1. Work with stakeholders to create clear and concise documents which portray UENSS strengths and weaknesses 2. Assist Higher Ed with assessment of economic development impacts in local communities	1. Q1 - Q2 2. Q1

T A B **17**

PBS Digital Classroom Grant

Issue

Utah Education Network and KUED are participating in an exciting project with PBS to gain further understanding of next-generation classroom services delivered across multiple distribution platforms, including digital terrestrial broadcast. A project overview is included with your materials.

Recommendation

This is an informational item; no further action is required by the Steering Committee at this time.

Tab 17 Attachment A

PBS Digitial Grant Classroom Project with Utah Education Network and KUED

Overview

Utah Education Network and KUED are participating in an exciting project with PBS to gain further understanding of next-generation classroom services delivered across multiple distribution platforms, including digital terrestrial broadcast. This document provides an overview of the project. A final results document will be provided upon project completion.

Background

As educational technology evolves, so must media organizations like PBS and its member stations, to ensure that video, supplemental content and related services evolve to "play" in schools of the future. Digital television and broadband technologies hold tremendous potential for education, through on-demand delivery of content; bundling video and related data; smart cataloguing and storage solutions; and advanced personalization and interactivity.

However, each type of technology presents media providers and educators with specific challenges and opportunities. Among those are:

• What types of interactivity are afforded by the technology, and how does this support meaningful instruction?

• What are the content formatting costs and rights-related issues associated with particular technologies?

• What are the infrastructure demands (at the station and at the school)?

• What are the implications with regard to interoperability?

• How scalable are particular technology solutions?

To understand the true potential of these technologies and the comparative benefits of different distribution mechanisms, public broadcasting is conducting an in-school pilot initiative, along with seven member stations and partner school districts in each station's community. The seven stations and partner school districts are:

• Idaho Public Television, in partnership with the Kuna School District

• Kansas City Public Television, in partnership with the Kansas City Unified School District #500

• WHRO/Norfolk, VA, in partnership with the Williamsburg-James City County School District

- Wisconsin Educational Communications Board, in partnership with the Madison Metropolitan School District
- KUED/Utah Education Network, in partnership with the Granite School District
- KLVX/Las Vegas, NV, in partnership with the Clark County School District
- New Jersey Network, in partnership with the Newark School District

Utah Education Network and KUED elected to participate in the project to gain a better understanding of these issues:

1 How could these new technologies be used in Utah classrooms?

2 How is classroom technology evolving and how could this evolution complement stations' transition to digital broadcast?

3 Which enhancements are most attractive and sustainable?

4 How should producers and content providers evolve to meet the needs of educators and learners?

5 What is the cost/benefit and workflow process required for this service (bandwidth allocation, content ingestion and indexing costs, school infrastructure, user interface, etc.)

6

Project Scope

Indexed rich media content built around the theme of U.S. history, westward expansion, will be delivered to pilot schools via the station's digital terrestrial television broadcast, broadband, and CD-ROM. Related interactive and text-based materials are packaged with the video and made available online in the same browser-like interface that allows users to call up/manage the video assets.

Content identified for this pilot includes Promontory (KUED); The West (Florentine Films); Lewis & Clark (Florentine Films); Themepark – Westward Expansion (UEN website).

A pre-configured server, complete with the software and hardware required to receive the station's digital television broadcast, was delivered to the participating pilot schools. PBS developed and UEN is hosting the user interface for the participating teachers. As part of the selection criteria for the pilot, participating schools were required to have the technology infrastructure to support all three technology platforms (i.e., computers with CD-ROM drives; a local area network; and Internet connectivity).

In addition to PBS's analysis of the relative costs and capabilities of various technologies, an independent evaluator will use interviews, surveys, classroom observations and other instruments to compile information about the following:

- Technical implementation issues

- User feedback

- Interface/service design

- Support of meaningful instruction

The station implementation phase began this summer. Content will be datacast to schools for instruction from mid-October through December. The results of the in-school pilot will be available in February. Utah Education Network and KUED staff see this project as a key step in both stations' transition to digital broadcasting and evolution of digital education services to K-12 schools in their communities.

The pilot was made possible through the generous support of The Arthur Vining Davis Foundations and the Corporation for Public Broadcasting.

Additional Information

CPB (Corporation for Public Broadcasting) "What is DTV?"

  http://www.cpb.org/digital/tv/whatis/

ETV Cookbook – Your Guide to Enhanced TV

  http://ETVcookbook.org/home/index.html

APTS (American Public Television Stations) Digital Information Website

  http://www.apts.org/html/digital/dtv/digital_services.htm

KULC Digital Television Informational Meeting:

Please join KULC staff for presentations, discussion, and information about KULC's digital initiatives including datacasting, national partnerships with onCourse, future plans for increased service including grants and new infrastructure developments.
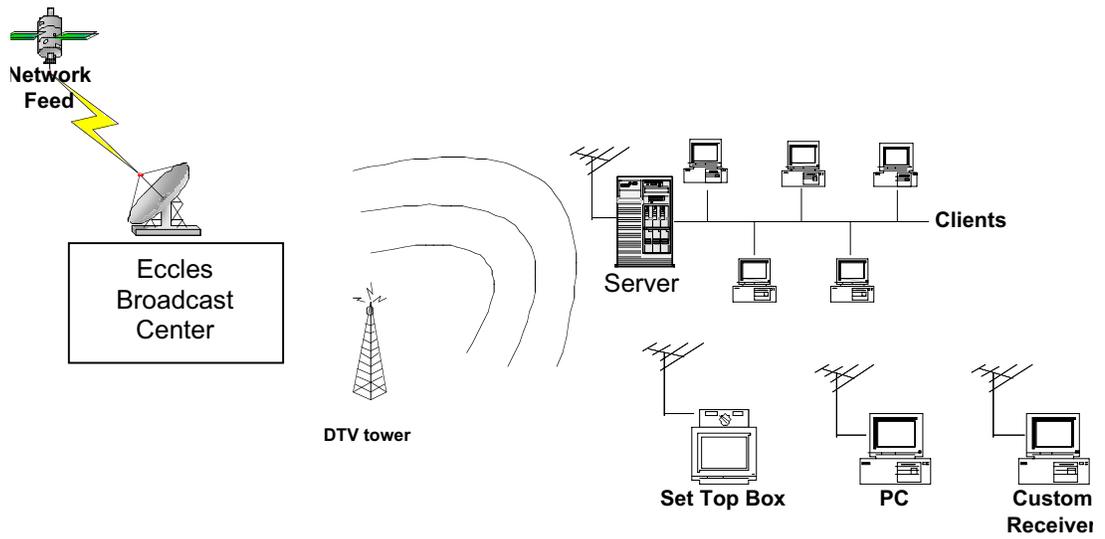
Friday November 8th

9:00 a.m. to 3:00 p.m.

Delores Doré Eccles Broadcast Center, University of Utah

To register, visit the KULC homepage at www.kulc.org

Datacasting Model

Network
Feed

Eccles
Broadcast
Center

DTV tower

Server

Clients

Set Top Box

PC

Custom
Receiver

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

August 16, 2002 - 9:00AM

Business Steering Committee Meeting

Present: Lisa Kuhn, Laura Hunter, Jim Stewart, Ryan Thomas, Phil Windley, Kirk Sitterud, Ray Timothy, Pat Lambrose, Glen Taylor, Mike Petersen, Bonnie Morgan, Stephen Hess, George Brown, Clif Drew, Brent Goodfellow, David Eisler, Amy Owen, Ray Walker, Barbara White (via EDNET), Reed Eborn (via EDNET), Larry Smith, Jeff Grandia, Daniel Patterson, Duane Jensen (for John Aland), Vernile Prince, Curt Huttsell, Bill Kucera, Jonathan Ball, Charice Black, Sheryl Hulmston, Louise Tonin, Cory Stokes (UEN), Karen Krier, Cory Stokes (SEDC), Randy Johnson, James Christensen, Coy Ison, Victoria Rasmussen, Dick Siddoway, Randy Scott, Renee Willemsen, Rick Mandahl, Rich Finlinson, and Troy Jessup.

I. Welcome and Introductions - Bonnie Morgan

Bonnie welcomed everyone to the meeting.

II. Review and Approval of Minutes - June 14th, 2002 (Action)

Corrections were made to the June 14th, 2002 minutes. On page 1-4, under Instructional Services, "adjustment tool" should read "alignment tool."

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the amended meeting minutes of June 14th, 2002. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

Please note: detailed information and discussion of the issues are included in the materials prepared for the meeting. Please refer to them for additional reference.

III. E-Rate Policy Paper - Mike Petersen

It was proposed that UEN become significantly more aggressive in pursuing E-Rate funding, as outlined in tab 3. The total E-Rate reimbursements possible for UEN at the end of the year would be 3.2 million dollars -- a significant increase over the past year, which was just over 2 million dollars. Davis District, which began to enter into end-to-end service contracts with Qwest starting last year, increased E-rate reimbursements from $400,000 to about 1.3, 1.4 million dollars.

Ray Timothy asked how UEN would actually conduct the negotiations between the districts and local telecommunications providers. Dan Patterson elaborated on the Millard School District's circumstances as an example of the potential opportunities afforded by a more aggressive approach to E-rate. He stated that UEN technical services staff have been working with Kevin Chapman in Delta and Fillmore. UEN's objective is to allow Citizens to install fiber and possibly cover those expenses through E-rate funding either in one (if it's under $500,000) or three years (if it's over $500,000). This allows Citizens to install an infrastructure they otherwise would not have had the incentive to do. The majority of the construction and transport costs would be a minimal charge for UEN in the long run. Citizens, does not have much experience with Ethernet services, and has been very willing to work with UEN in designing the system, while providing the hardware and specifications. If this is successful, E-rate will actually pay for 70% of the costs that are associated with upgrading that infrastructure.

A question was raised about the current legislation as it pertains to E-rate. Would the new E-rate plan require more than just coordination on the parts of UEN and the school districts? Mike stated that there would be a presentation in which UEN is participating with the IT commission the week of August 22nd, 2002, in which statewide coordination and other E-rate issues will be addressed. Based on the responsibility UEN has as the provider of the network, we already perform a statewide coordinating role. Jonathan Ball confirmed that the IT Commission would be meeting August 22nd, 2002, to investigate issues brought up during the E-rate discussion. He stated that the commission's investigation would look into 'end-to-end services,' data collection and maximizing reimbursement.

In addition, the question of E-rate's dependence on statistics provided through the free and reduced lunch program was questioned. Because of several factors, reported data show lower poverty rates than actually exist. Alternative methods of gathering data were suggested, such as an anonymous survey (Only 50% return is required to be considered a valid format). It was also suggested that already existing demographic data be considered to gather an accurate count for E-rate purposes.

Amy Owen raised the issue of public libraries, suggesting that they are even further behind than public schools in applying for E-rate reimbursements. She would like to involve Craig Nielson, who has been doing some coordination with E-rate, to be brought in on any statewide E-rate discussions. Mike stated that UEN's first responsibility is to the public schools, but saw tremendous value in a coordinated effort that would also include the libraries.

Mike concluded by saying there would be about a 6-month lead-time in seeing returns on E-rate. The 471 forms would be submitted by the end of January, and the

reimbursements would start coming in July 1st, 2003. UEN is also pursuing, primarily with Qwest, some activities that will impact e-rate during this year.

Motion: **It was moved and seconded that the E-Rate position paper be approved and adopted. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

IV. FY 2003 Budget Cuts - Mike Petersen

Mike asked if there were any questions regarding the budget cuts. None were raised. However, Dave Eisler stated that UEN should note that the legislature responded positively to UEN's needs, and therefore thanks should be expressed for the consideration shown UEN. Also, Jonathan Ball commented that the unofficial 2002 closing balance is 6-9 million dollars in the black. In addition, the legislature projected a 2% increase in employment for FY 2003, which may be an indicator of what is to happen in the next 10 months.

Motion: **It was moved and seconded that the members of the Utah Education Network Steering Committee approve the FY 2003 Budget Cuts. THE MOTION PASSED WITH ALL VOTING IN FAVOR.**

V. FY 2003 Budget - Mike Petersen

Mike explained to the Steering Committee that the FY 2003 budget reflects large sacrifices, including a reduction in personnel and no staff salary increases.

Pat Lambrose asked about the amount budgeted for contingency (table 3, and on page 5-11). Mike Petersen and Steve Hess explained that this fund was created to accommodate emergencies, and unanticipated overruns in the budget. The amount was increased from last year, in anticipation of potential budget cuts that may occur during the year.

Mike also explained that there is not a separate router replacement budget this year, the replacement of routers would be accommodated within the Technical Services Project Account

Motion: **It was moved and seconded that the members of the Utah Education Network Steering Committee approve the FY 2003 Budget. MOTION PASSED WITH ALL VOTING IN FAVOR.**

VI. Technical Services FY 2003 Strategic Plan (Action) - Ryan Thomas

Ryan reported that the plan was approved by the Technical Services Subcommittee. He explained how the spreadsheet in tab 6 was organized. Projects and regions are identified, and a color code is used to indicate the status of the project. Ryan indicated that holds on projects were primarily associated with financial issues.   It

was then indicated whether or not the technical plans were consonant with Technical Services' goals, of which there are 15.

Curt Hutsell, President of Utah Rural Telecommunications Association this year, asked for elaboration on the parameters of the Southeast Utah project. Jim Stewart explained that Technical Services hopes to increase capacity in the Southeast by adding more efficient codecs, before the beginning of the school year.

Motion: **It was moved and seconded that the members of the Utah Education Network Steering Committee adopt the Technical Services FY 2003 Strategic Plan with the understanding that the subcommittee will continue to work on prioritization of projects. MOTION PASSED WITH ALL VOTING IN FAVOR.**

VII. <u>Utah Education Network Connection Policy (Action)</u> - Ryan Thomas

Ryan Thomas reported that the Technical Services subcommittee approved the Network Connection Policy, whose basic assumptions are that users insure that there are appropriate environmental supports for the elements of the network that need to be housed in distributed environments. Additionally, there is an obligation on the part of the participants in the network to insure that the necessary information is provided to the UEN NOC to assure network reliability.

Motion: **It was moved and seconded that the members of the Utah Education Network Steering Committee adopt the Network Connection Policy. MOTION PASSED WITH ALL VOTING IN FAVOR.**

VIII. <u>File Sharing and Misappropriation of Network -- Resources Policy (Information)</u>

Ryan Thomas introduced the subject by saying that this is an issue about which there is tremendous concern, but perhaps less consistency in ways to address the concern. One of the fundamental issues is that a tremendous amount of bandwidth is consumed in peer-to-peer file sharing, with some of the usage being inappropriate (e.g. copyright violations). There was concern that as the incidence of copyright violations increases, the responsibility of handling copyright violations may overwhelm George Brown, who is currently handling such misconduct. It was suggested that legal counsel become involved in shaping this policy, to balance local liability with concerns about copyright violations. The Steering Committee was also encouraged to structure the policy so it encompasses local acceptable use policies.

Laura Hunter recommended that this policy have an annual or biannual review. <u>It was agreed that Ryan would bring this issue back to the Steering Committee's next meeting.</u>

IX. Review of Steering Committee Meeting Format (Information/ Action) - Stephen Hess

The Steering Committee members responded to a survey outlining several options for the format of Steering Committee meetings. As the vote was not conclusive, the topic was resubmitted to the Steering Committee for discussion. The discussion focused primarily on Options 1 and 2, as outlined in Tab 9. Issues ranged from adequate time for discussion of topics, ability to attend as many subcommittee meetings as possible, and travel considerations for those who do not live in the University of Utah area. It was also suggested that the Steering Committee does not have to stay exclusively with one format. David Eisler suggested that the subcommittee meetings could be scheduled as required depending on the amount of work that needed to be done.

After extensive discussion, there appeared to be a consensus to use Option 2. Therefore, subcommittee meetings would be held on different days prior to the Steering Committee. It was agreed that subcommittee meetings would be held in September, and then held every other month after that. The Steering Committee Meeting would be held in October, and also held every other month. Meetings could be scheduled or moved depending upon the work-flow.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee follow the meeting format as outlined in Option 2, with scheduling flexibility, contingent on the work that needs to be done. MOTION PASSED WITH ALL VOTING IN FAVOR.

X. Other

Bonnie Morgan announced that Stephen Hess would be stepping down as the Executive Director of UEN, and proposed that Mike Petersen become the new Executive Director.

Bonnie thanked Steve for the wonderful work he has done during his years of service to Utah's education system, and explained that Steve was going to focus his energies on his role as the University's Chief Information Officer.

Clif Drew recommended that the Steering Committee recommend appointing Steve Hess to the Steering Committee. It was agreed that the Steering Committee would recommend this action to the Governor.

Steve Hess expressed his appreciation for the support he had received from the Steering Committee, educators throughout the state, and the staff at UEN. He spoke of the satisfaction he had gained during his years of service, recommended Mike highly for the position of Executive Director of UEN, and thanked everyone for their support.

Mike Petersen expressed his tremendous respect for Steve, as well as his commitment to enhance education through technology, and the responsibility he feels to build on the work that preceded his appointment. He looks forward to working with the Steering Committee on the projects ahead.

David Eisler moved that the Steering Committee approve the appointment of Mike Petersen as Executive director of UEN, and prepare a resolution of thanks and appreciation for the service that Steve Hess has given in leadership of UEN.

Motion: **It was moved and seconded that the UEN Steering Committee approve the appointment of Mike Petersen as Executive Director of UEN and prepare a resolution of thanks and appreciation to Steve Hess for his years of leadership of UEN. MOTION PASSED WITH ALL VOTING IN FAVOR.**

The meeting adjourned at 11:00 a.m. with a duration of 2 hours.

The next meeting is scheduled for October 18, 2002 - 9:00a.m. at the

Dolores Doré Eccles Broadcast Center

T A B **19**

STEERING COMMITTEE ROSTER WITH MEMBER TERMS

UTAH EDUCATION NETWORK STEERING COMMITTEE
October 11, 2002

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Jeannie Watanabe occasionally attends
in his place.
Term Ends: July 31, 2005

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Executive Committee
to the UEN Steering Committee

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T A B **20**

OTHER