

# Utah Education Network Steering Committee

April 17, 2009



**UTAH EDUCATION NETWORK  
STEERING COMMITTEE**

**A G E N D A**

**APRIL 17, 2009**

9:00 a.m.-  
11:00 a.m.

**Committee of the Whole / Business Meeting**

---

**Welcome and Introductions**

Tab 22	
	SUMMARY OF LEGISLATIVE RESULTS FY 2010 - DISCUSSION . . . . . 1
Tab 23	
	FY 2010 STRATEGIC PLANNING - ACTION . . . . . 5
	ATTACHMENT A - FY 2009 STRATEGIC PLAN. . . . . 7
Tab 24	
	UEN CONNECTION POLICY AGREEMENT - DISCUSSION . . . . . 11
Tab 25	
	MY SOURCE COMMUNITY IMPACT FOR EDUCATION AWARD - DISCUSSION . . . . . 13
	ATTACHMENT A - MY SOURCE TESTIMONIAL . . . . . 15
Tab 26	
	E-RATE AUDIT - DISCUSSION . . . . . 17
Tab 27	
	STEERING COMMITTEE MEETING MINUTES. . . . . 19
Tab 28	
	OTHER . . . . . 25

11:00 a.m.-  
12:00 p.m.

**Instructional Services Subcommittee**

---

Tab 29	
	COMMUNICATION STRATEGIES - DISCUSSION . . . . . 27
Tab 30	
	INTERACTIVE VIDEO CONFERENCING - INTELLECTUAL PROPERTY AND PRIVACY ISSUES RELATED TO IVC RECORDING AND STREAMING - ACTION. . . . . 29
Tab 31	
	MY.UEN PREMIUM SERVICES - ACTION. . . . . 31

Tab 1  
 PUBLIC EDUCATION AND HIGHER EDUCATION ADVISORY  
 COMMITTEE REPORTS - DISCUSSION. . . . . 33

11:00 a.m. -  
 12:00 p.m.

**Technical Services Subcommittee**

---

Tab 2  
 NETWORK OPERATIONS CENTER TIER 1 AND VIDEO OPERATIONS  
 CENTER CONSOLIDATION - DISCUSSION . . . . . 35

Tab 3  
 TECHNICAL SUMMIT - DISCUSSION . . . . . 37

**U P C O M I N G M E E T I N G S**

- Steering Committee Meeting - June 26, 2009, 9:00 a.m.
- Instructional Services Subcommittee Meeting - June 26, 2009, 11:00 a.m.
- Technical Services Subcommittee Meeting - June 26, 2009, 11:00 a.m.

***Please place these materials in your Steering Committee Binder.***

## SUMMARY OF LEGISLATIVE RESULTS FY 2010 - DISCUSSION

### Issue

---

This report provides a summary of the results of the budget decisions made during the 2009 Legislative General Session for FY 2009 and FY 2010. UEN staff worked closely with Legislative leadership and Higher Education Appropriation Subcommittee members to soften the impact of budget reductions proposed for UEN. We were anticipating a 19% cut in the base budget for FY 2010.

### Background

---

UEN continues to have excellent support from the Co-chairs of the Subcommittee, Sen. John Valentine and Rep. Kory Holdaway and from the Subcommittee members. UEN's reputation for dependability, integrity and accountability to the Legislature prompted House Speaker Dave Clark, to say that "his heart was with UEN" and that he would do all that he could to help alleviate the hit to UEN. In another instance, Sen. Howard Stephenson's (Co-chair of Public Education Appropriation Subcommittee) enthusiastic support for UEN was demonstrated by his attempt to include full funding for UEN's elementary and charter school bandwidth upgrade project in the Revenue Bond and Capital Facilities Authorizations Bill (SB 5). The Executive Appropriations Committee and Legislative leadership in both houses were also sympathetic to the UEN funding needs for FY 2010.

To balance the budget with a deficit of \$1.8 billion, legislators went through the extremely difficult process of making deep cuts in all areas of state government, including public and higher education. However, the arrival midway through the session of \$600 million federal stimulus funds (American Recovery and Reinvestment Act of 2009) and other short-term funds were used to soften the blow of the state's budget shortfall. That money will expire July 1, 2010, forcing legislators to find another temporary fix next session or hope that the economy rebounds and a long-term remedy can be found. The Legislators did not touch \$414 million set aside in Rainy Day Funds or \$100 million held in reserve for K-12 growth.

#### **Overall Funding Change for UEN**

The Utah Education Network's ongoing state funding was reduced by \$3,794,000. Compared to the original FY 2009 base, this is a reduction of approximately 17.9 percent. That cut was reduced considerably for the coming year—and the coming year

only—thanks primarily to \$2,252,000 of one-time funding from the federal stimulus dollars that was used to help fund higher education. In the end, UEN was left with a budget cutback of \$1,542,000 for FY 2010.

Despite this reduction in funding, UEN has been able to make positive progress on bandwidth upgrade projects and on several network infrastructure improvements. For example:

- **Upgrade Bandwidth at Elementary and Charter Schools** – In a joint partnership with public education and the charter schools, UEN will upgrade network bandwidth to 100 MBPS for 70 elementary schools and 18 charter schools. UEN will only be responsible for one-third of the ongoing circuit charge.
- **South Ring Redundant Network Loop** – UEN discontinued the St. George to Las Vegas Internet connection and replaced it with a link from SLCC to DSC for an annual savings of nearly \$72,000. The new configuration provides a redundant loop to SUU and DSC.
- **Increased Internet Capacity** – UEN will increase Internet capacity to 10 GBPS through consolidating existing Gigabit Internet connections. Economic conditions and the level of bandwidth that was purchased will lower Internet costs per megabit by roughly 50%. The new configuration will provide sufficient bandwidth for the next couple years and lower operating costs by about \$70,000 in FY 2010 and nearly \$200,000 in FY 2011.

### **Other Funding Issues**

The Higher Education Appropriations Subcommittee, at the recommendation of Co-Chair Kory Holdaway, recommended that the UEN appropriation starting in FY 2011 should be divided into two line items. Network operations would be separated from administrative functions to better prevent network infrastructure from sustaining future budget cuts. By linking the direct cost of supporting and operating the network to the teaching mission of public and higher education, legislative leadership would be less inclined to cut this component of UEN's budget.

Beginning in FY 2011, UEN will subdivide its single line item appropriation into two components. The first line item will include a funding request for administration, operations and maintenance, public information, KUEN broadcasting, and instructional services. The line item will also include any funding required for regional advocates, non-technical staff, operations, professional development, scheduling, software development, special projects, web resources and all other related expenditures.

The second line item request will be for technical services and its various components as follows: budgets supporting network projects and initiatives, Blackboard-Vista, enterprise applications, field operations, internet access, network engineering, the network operations center (NOC), the video operations center (VOC), pioneer library, and expenditures for operations (circuit charges), the research network, security, technical services planning, technical administration, and all other related expenditures.

House Bill 287: UEN Amendments was sponsored by Rep. Kory Holdaway. It modifies the statutory authority of the Utah Education Network by adding the authority to provide network support to the central administration of cities and counties (local government). They can use the network to transfer critical data to a secure data

warehouse for safekeeping and for the recovery of this information in case of a disaster if the network operated by the Department of Technology Services is not available. HB 287 was approved unanimously in both the House and Senate, and was signed into law by the Governor.

## **Recommendation**

---

This is an information item and requires no further action by the committee.





**FY 2010 STRATEGIC PLANNING - ACTION****Issue**

---

UEN wishes to reinforce our mission of “networking to create educational opportunities, connect citizens and collaborate with partners” by beginning work on the UEN Strategic Plan for 2009-2010. UEN prides itself on the practice of consultation and collaboration with its stakeholders when determining the overall needs and strategic directions for the organization. The upcoming fiscal year will require priority setting that will perhaps be more difficult than in times when there has been more funding available.

**Background**

---

In past years UEN has sponsored Steering Committee, Institutional, and Departmental Retreats to gather input for strategic planning. Last year UEN gathered input from twelve strategic planning visits with schools, agencies, councils, and associations across the state where we talked with over 100 individuals in 3 months. Our current Long Term Strategic objectives focus upon Wide Area Network, Web Resources, Enterprise Applications, Distance Education, Broadcast Services, and Professional Development. We are not expecting these Long Term objectives to change radically. But, we do expect the number of projects and outcomes will be reduced because of significant budget cuts.

Another issue we wish to discuss is whether it is time for UEN to look at some new and different funding models? We have always depended upon state appropriations and grants. Most other state education networks rely extensively on cost recovery from the services they provide. Perhaps there are some revenues which could be generated by charging for some services. Are there new partnerships which should be developed in order to qualify for a broader range of state and federal financial stimulus funds and granting agencies?

To get some initial feedback, we encourage you to review our FY 2009 Strategic Plan, which is Attachment A of this agenda item.

**Recommendation**

---

It is recommended that a Strategic Planning Retreat lasting for a day and a half be scheduled on May 19th and 20th. We propose a central location, perhaps at Utah Valley University or Salt Lake Community College Larry Miller Campus. The longer time for the retreat would allow thorough discussion of network, technical, and instructional

issues. The results of this planning session and the 2009-2010 budget would then be ready for discussion and adoption at the June 15th, 2009 Steering Committee meeting.

# Utah Education Network

## FY 2009 Strategic Plan

### Mission

We network to create educational opportunities, connect citizens and collaborate with partners.

### Vision

Be Utah's most trusted, accessible and recognized partner for innovation in educational technology.

### Values

CARING – Supporting community, customers, and co-workers

LEADERSHIP – Advancing relationships and encouraging ideas

INTEGRITY – Keeping our promises

COMMUNICATION – Listening to meet needs

SERVICE – Benefiting our partners

### Needs

Utah's public schools, colleges, and universities depend on the Utah Education Network to perform their missions. UEN provides Internet and network connectivity to every public school and college and university through the UEN wide area network; manages a statewide video conferencing system; hosts enterprise-level software applications for our public and higher education partners; offers instructional programming through KUEN, a 24/7 television station; supports a growing range of rich educational resources at UEN's Web site, [www.uen.org](http://www.uen.org); and supports the technology professional development needs of Utah teachers.

For thousands of Utah students and educators, the Internet is their school, classroom, meeting place, and library. The Internet must be accessible to every educator, student, administrator, and staff member from any location and at all times. It is the data and communications distribution system used to deliver hundreds of administrative, academic and student support applications affecting every student, educator, and staff member countless times each day. To ensure full-time access to the Internet, UEN must

provide reliable, high capacity, and scalable network connections.

The demand for increasing network capacity in public and higher education is demonstrated by network backbone utilization statistics. During spring, 2008, backbone utilization reached 117% of capacity on the central ring and 76% of capacity on the northern ring. To keep up with growing network capacity demands, UEN has worked with college and university and school district leaders and Utah telecommunications providers to increase the capacity of network connections throughout the state and to expand backbone capacity tenfold where it is needed.



In the Utah System of Higher Education, enrollment in online, technology-enhanced, Interactive Video Conferencing, and KUEN classes has grown dramatically for the past several years. More than 30 percent of USHE college students now enroll in at least one technologically-delivered course each term. Enrollment in the Utah Electronic High School has also increased significantly and there are now about 23,000 students actively completing courses offered by the Utah Electronic High School.

Because of the trends described above, educators, public and higher education staff members, and UEN employees must be technologically competent. UEN must play a key role in providing training to its own staff members, and to teachers, faculty members, and technology staff members in educational organizations throughout the state.

UEN is driven by the needs of education. As it responds to more diverse needs, it grows in complexity, and supports more services at more locations. The result is increased pressure on all of us to coordinate, plan, and make decisions collaboratively for the mutual benefit of all regions of the state and all levels of education. Improved coordination of IT policies and backbone infrastructure will guarantee effective sharing of resources, lower prices through joint purchasing, and assure efficient use of technical support and training as UEN staff members work collaboratively with their public and higher education colleagues. Gaps in effective coordination, planning, and governance must be identified and eliminated.

There will be significant challenges facing us during the coming year. The economy of Utah is growing but at a slower pace than it has in the recent past. Consequently, state financial resources must be carefully prioritized to meet numerous compelling needs that compete for available state resources. UEN must achieve the greatest value possible from limited state resources, and continue to aggressively seek grants and other revenue sources to augment state funds. And we must carefully prioritize Network projects to gain the greatest benefit from the dollars we spend.

### Strategic Objectives

*A summary of recent accomplishments and long term strategic objectives is included below:*

#### WIDE AREA NETWORK

##### Recent Accomplishments

1. Completed NEMO standardization project for monitoring and managing network.
2. Launched outage notifications system.
3. Developed new network management tools, ie. Weather Map and Quick Ticket.
4. Completed GigE migration at secondary schools.

##### Long Term Objectives

1. Increase backbone capacity to 10 Gigabits/second.
2. Expand connectivity to elementary, charter and satellite campus locations.
3. Develop plan and secure funding for 10GigE Internet connectivity.
4. Support research community initiatives.
5. Develop, plan and acquire fiber optic resources.

6. Develop and implement strategy for high performance network connectivity.
7. Complete disaster recovery plan.
8. Evaluate and expand network tool suite.
9. Continue with Tech and Security Summits.
10. Focus on Regions – priorities, advocates, tech forums.
11. Develop plan and budget for refreshing network technology beyond usage of E-Rate funding.

#### WEB RESOURCES

##### Recent Accomplishments

1. Launched redesigned uen.org.
2. Rolled out additional my.uen functionality.
3. Supported the development of Secondary Math lesson plans.
4. Aligned additional resources to support the K-12 Core curriculum.

##### Long Term Objectives

1. Develop personalization features for uen.org which will allow visitors to collaborate and share information online.
2. Update pages for 501 accessibility compliance and increased functionality.
3. Make internal and external resources that support instruction seamlessly available to end users.



#### ENTERPRISE APPLICATIONS

##### Recent Accomplishments

1. Deployed a federated search service across the licensed Pioneer Library databases.
2. Increased the Digital Media Service collection to over 10,000 media objects.
3. Handled over 5 million faculty and students logins from 15 campuses accessing online course materials via the centrally hosted Blackboard Vista Course Management System.
4. Completed UVU and USU migration to Blackboard Vista.
5. Contributed technical leadership to creating the national PBS Educational Content Asset Repository (EDCAR) project.

6. Secured licensing and began implementation of the WIMBA web conferencing service for higher education, K12 and the State Libraries.

#### Long Term Objectives

1. Continue to expand the Pioneer Library partnership and resources for all Utah residents.
2. Provide an easy-to-use web interface enabling fast, reliable searching of Pioneer Library premium services and partner repositories.
3. Provide a reliable; sustainable centrally managed course management service supporting higher education institutions and K-12 teacher professional development.
4. Provide a statewide Web conferencing service supporting courses and meetings for all state higher education and K-12 institutions.
5. Acquire, manage, distribute and share high-quality digital media content collections from trusted education partners.
6. Enable inter-institution collaboration in building, maintaining and delivering course content online through tools designed to create portable, shareable learning content.
7. Encourage online course delivery best practices by facilitating regular information sharing events among consortium institutions.
8. Integrate enterprise services to provide easy, personalized access to educational media, and web collaboration services from my.uen and online courses.

#### DISTANCE EDUCATION

##### Recent Accomplishments

1. Implemented new hardware and software platforms (TMS- Tandberg Management System).
2. Completed UENSS conversion to IVC.
3. Completed statewide training on new IVC equipment.
4. Implemented new Video Operations and Logistics reorganization and remodel.

##### Long Term Objectives

1. Evaluate new and emerging video technologies with an eye toward integration with web conferencing environment.
2. Transition from current UEN IVC equipment and circuit funding practices to alternative institution/site based funding mechanisms.

3. Create standardized practices and guidelines for IVC users.
4. Develop and support IVC purchasing/vendor agreements.
5. Increase internal communication and project management to develop operational practices to reflect new technical systems.

#### BROADCAST SERVICES

##### Recent Accomplishments

1. Launched the new 9.2 digital channel, MHz Worldview.
2. Received two awards from the National Educational Telecommunications Association for "SciFi Friday" and "NetSafe Utah" outreach.
3. Expanded programming and outreach efforts to include new audiences, ethnic festivals, science fiction conventions, health conferences, and senior citizen care centers.
4. Met consumer education goals with the DTV education campaign.

##### Long Term Objectives

1. Expand digital translator system to rural areas.
2. Expand use of the digital signal through datacasting to youth corrections, adult corrections, and other clients.
3. Use the programming and outreach resources of the station to support and promote education in Utah.
4. Leverage our national broadcast relationships to improve eMedia, CollegeMedia, and other content services.
5. Develop and support statewide partnership-specific programs tied to our educational mission.

#### PROFESSIONAL DEVELOPMENT

##### Recent Accomplishments

1. Developed 13 new courses, revised and updated 39 courses.
2. Hosted 40 new episodes of Faculty Lounge.
3. Created, tested, revised, and launched community professional development blogs.
4. Revised the Integrating Technology and Curriculum program to two workshops, added 21st Century Learning component, added new programs.
5. Implemented new orientation for online courses.

#### Long Term Objectives

1. Assess and respond to changing technology professional development needs.
2. Expand online, web conferencing, and other methods for providing technology integration professional development beyond face-to-face workshops.
3. Maximize use of current communication channels and develop additional audiences.

#### GOVERNANCE AND ACCOUNTABILITY

##### Recent Accomplishments

1. Used strategic planning and budget processes to increase the capacity and reliability of the UEN WAN, implement state-level enterprise applications, and improve other UEN services.
2. Implemented the quarterly performance dashboard, and regularly reported key service metrics to UEN stakeholders.
3. Improved cross-departmental communication by implementing bi-monthly managers' meetings.

##### Long Term Objectives

1. Coordinate educational technology governance across the state, and be accountable to our stakeholders through communication, measurement, and reporting on UEN services
2. Ensure that the UEN Steering Committee, subcommittees, advisory committees and constituent groups effectively guide UEN in providing services needed by UEN stakeholders.
3. Request new funding for UEN priorities and maximize state funds through acquiring external grants, E-Rate, and other revenue sources.
4. Track UEN performance, projects and services and communicate with stakeholders regarding our work.
5. Strengthen communications about UEN with Steering Committee and to public and higher education administrators, staff, and faculty.
6. Increase internal communication, project management and coordination of services.

## UEN CONNECTION POLICY AGREEMENT - DISCUSSION

### Issue

---

UEN Technical Services is developing a new agreement for basic connection service to the UEN Wide-Area-Network backbone and Internet to address growing problems of network security, monitoring and technical support, authorized use, and requests for bandwidth increases. With the deployment of broadband Ethernet to charter and elementary schools, libraries, etc., UEN staff have found a need to develop clear policies about roles and responsibilities of UEN staff and connected organizations. These policies cover areas such as: contacts for administrative, technical, and security issues; network security; customer premise demarcation definition; 24/7 building and room access; K-12 content filtering; authorized network access; service upgrades and associated costs; and connection policy enforcement.

### Background

---

UEN staff are developing a draft connection agreement to be presented to the Steering Committee in June. UEN is sensitive to the need for charter schools to provide network security applications (firewall devices, etc.) for connections into the UEN network. Charter schools seem particularly vulnerable to malicious attacks to sensitive and private information stored on their school's Local-Area-Networks (LAN). Additionally, there are unauthorized entities connecting into the UEN network. A few of these unauthorized entities have called Network Operations staff requesting technical support. With growing budget constraints we feel a great need to detail in policy UEN responsibilities with respect to network upgrades requests.

UEN must consider how to deal with connection agreement breaches. Are there times network access should be limited or even curtailed? For example, if a security problem were found at a particular location, UEN will notify the customer and take corrective action to minimize the potential threat to other institutions connecting in the UEN backbone. Should that location continue on line without corrective measures or pose a threat to other locations it may become necessary to block traffic until a known problem is corrected.

This agreement will also address the responsibilities and liability of UEN regarding provided services.

It is envisioned this basic agreement would be a 2 or 3 page document that UEN would require to have signed for future organization connections to UEN, and would take to school districts, charter schools, libraries, etc. currently connected for signature from senior management at their organization.

## Recommendation

---

We propose to discuss the issues identified in this memorandum at a preliminary level. In the June meeting, our staff will propose an agreement to be reached with all connecting organizations.



## MY SOURCE COMMUNITY IMPACT FOR EDUCATION AWARD - DISCUSSION

### Issue

---

At an award ceremony with the Council of Chief State School Officers and the Corporation for Public Broadcasting on March 7, 2009, UEN received a “My Source Community Impact Award for Education” for its my.UEN Teacher Portal.

### Background

---

The My Source Community Impact Awards for Education were created by CPB to recognize local public television stations for outstanding service to students, teachers, parents and caregivers in their communities. UEN’s my.UEN Teacher Portal was highlighted as “an easy to use online tool that allows teachers to provide information to parents about classroom events, assignments, student progress and class rules.”

The My Source campaign is based on personal testimonials of end users, as shown in this tab. Rich Finlinson at UEN also produced a podcast about my.UEN available for listeners at <http://images.uen.org/netnews/downloads/apro9NETnews.mp3>

Web statistics for my.UEN demonstrate the impact of this service, with March showing record levels in every category for both my.UEN and *www.uen.org*.

My.UEN had 96,637 unique visitors in March (reflecting an annual growth rate of 96.94%). Those visitors gave 209,902 visits, providing 11,791,974 hits to output 89.45 GB of data. These numbers are the highest for any single month in my.UEN’s history.

Unique visitors to *www.uen.org* increased 32.63% over the previous year to 523,006 for 908,286 total visits, and 41,782,918 hits (averaging around 1.3 million hits per day), and 295.45 GB of output.

Record numbers of educators and parents are finding that my.UEN is a great way to support home-school communication and UEN was pleased to be singled out for this service. As part of the award, UEN also receives a \$2,000 promotion fund that we will use to continue to promote the service during next school year.

### Recommendation

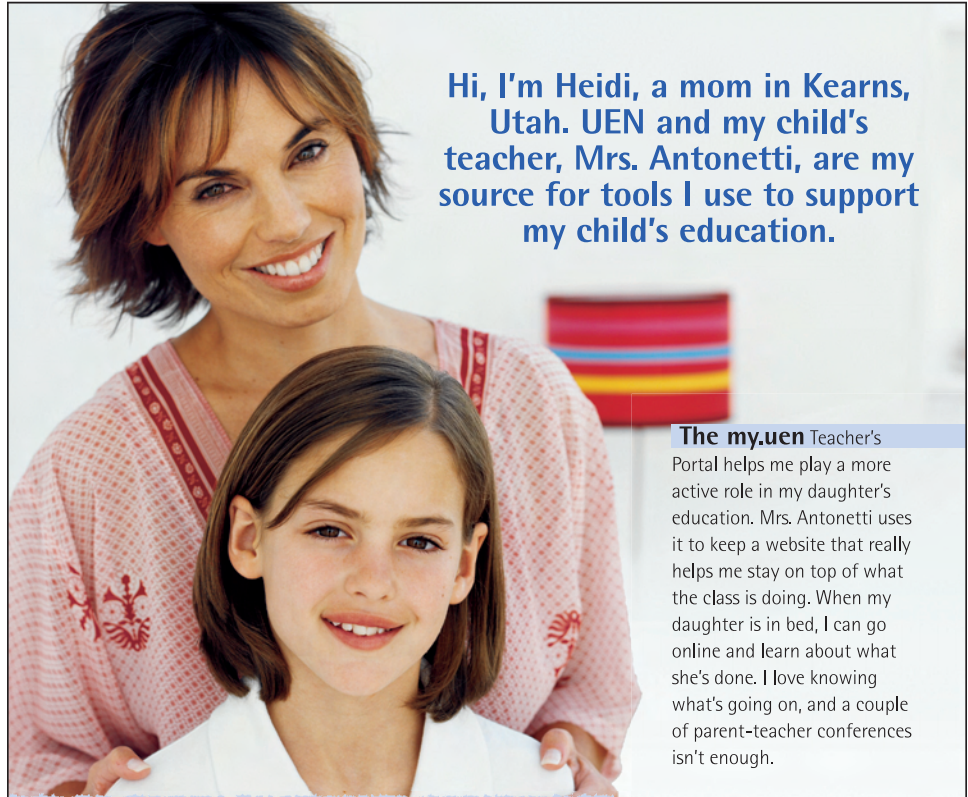
---

Committee members are asked to promote use of my.UEN in their local districts and institutions. No further action is required at this time.



# TAB 25 ATTACHMENT A

## MY SOURCE TESTIMONIAL



Hi, I'm Heidi, a mom in Kearns, Utah. UEN and my child's teacher, Mrs. Antonetti, are my source for tools I use to support my child's education.

**The my.uen Teacher's Portal** helps me play a more active role in my daughter's education. Mrs. Antonetti uses it to keep a website that really helps me stay on top of what the class is doing. When my daughter is in bed, I can go online and learn about what she's done. I love knowing what's going on, and a couple of parent-teacher conferences isn't enough.

**I also love** that the website is so easy to use—there are tabs for math, reading, writing, etc., so it's easy to find what I'm looking for. If my daughter has forgotten to bring home her spelling words or other work, we can download it easily. She also goes onto the

**UEN is my source for a great teacher's website.**

—Heidi, Kearns, UT

website several times a week for everything from educational games to worksheets she can customize with her own name and print off. She's having fun while reinforcing what she's learning in school, and I feel good knowing the resources and links on Mrs. Antonetti's my.uen website are age-appropriate and safe. I even use the website with my other two children!



Public broadcasting has something for everyone with quality, commercial-free programming and media services that enhance local communities. How has public broadcasting touched your life today?



**E-RATE AUDIT - DISCUSSION****Issue**

---

On January 2, 2009, UEN was notified by the audit firm Ernst & Young that we were one of several randomly selected E-Rate beneficiaries identified for and subject to an IPIA audit (Improper Payments Information Act). Ernst & Young is one of several audit firms retained by USAC to conduct these audits under the authority and direction of the FCC's Office of Inspector General. The Ernst & Young audit team arrived on site February 9, 2009 and completed their field work here on March 12, 2009.

The auditors conducted what is referred to as a "compliance attestation examination" where all aspects of E-Rate program compliance are scrutinized. Twenty-three separate E-Rate funding requests, for which UEN received reimbursements during the funding years 2006 and 2007, were examined in great detail (July 1, 2006 – June 30, 2008). Additionally, the auditors completed a thorough examination of the organization's internal processes that relate to our participation in the program. Some of the process details that were affirmed for compliance are:

- NSLP data verification and validation – Thanks to Child Nutrition Program staff at USOE
- Technology plan creation and approvals – Thanks to Rick Gaisford & staff at USOE
- Entities' eligibility and qualification for reimbursements
- Procurement – RFP/Competitive bidding, contracts
- Payments for services and cost allocations
- CIPA compliance
- Invoicing details – proof of receipt/payment
- Letters of Agency – UEN membership
- Document retention – five years

In addition to the audit examination of UEN, while the audit team was on site, the USAC Director of Outsourced Audit Services conducted an audit oversight exam at UEN.

**Findings**

---

There was one finding reported by the auditors as of 4/06/09.

In determining the statewide ineligible cost allocation for Internet Access, UEN included the Utah State Office of Education (USOE – an ineligible entity) as an eligible

entity in calculating the percentage of ineligible costs to be deducted from funding and reimbursement requests for these state-wide services.

This finding is best characterized as a minor ministerial error, not a rule violation. The monetary effect of this finding amounts to nearly \$250 dollars. During the two funding years subject to this audit, UEN received a total of \$16.5 million in reimbursements.

At the conclusion of the audit team's fieldwork, UEN participated in a closing conference with the USAC Director of Outsourced Audit Services and the Ernst & Young audit team. Comments received from Ernst & Young and the USAC staff were very positive with regard to UEN's performance in the audit itself. Very positive comments were received from both USAC and some of the audit staff with regard to UEN's processes, governance, leadership, and engagement in providing technology for education. All in all, the auditors and USAC were very impressed with UEN's approach and success with the E-Rate program.

While the audit itself went very well, UEN was able to take away from the experience some valuable ideas for process and document retention improvements. The experience seems to have been positive for all involved.

## **Recommendation**

---

This is an information item and requires no further action by the committee.

## STEERING COMMITTEE MEETING MINUTES

### UTAH EDUCATION NETWORK STEERING COMMITTEE

February 20, 2009 – 9:00 a.m.

**Members Present:** Kenning Arlitsch, Ron Barlow, Steve Corbató, Stephen Fletcher, Rick Gaisford, Brenda Hales, Stephen Hess, M. K. Jeppesen, Christine Kearn, Gary Koeven, Vince Lafferty for Ronda Menlove, Pat Lambrose, Eric Mantz, Gail Niklason, Mike Petersen, Glen Taylor, Ray Walker, Gary Wixom.

**Others Present:** Scott Allen, Barry Bryson, Scott Chaffin for Larry Smith, Lisa Cohne, Paul Crawford, Jeff Egly, Rich Finlinson, Boyd Garriott, Thom Gourley, Cyd Grua, Eric Hawley, James Hodges, Laura Hunter, Troy Jessup, Doug Jones, Karen Krier, Lisa Kuhn, Casey Moore, Bryan Peterson, Victoria Rasmussen, Joni Robertson, Dennis Sampson, Nate Southerland, Jim Stewart, Bruce Todd, Kathleen Webb.

#### **Welcome and Introductions**

Gary Wixom welcomed everyone to the business portion of the Steering Committee meeting. Mike Petersen asked for a few minutes so a couple of people could be recognized for their hard work and dedication to the Steering Committee. The first person Mike wanted to recognize was Carlene Walker. Carlene was a Steering Committee member for over 6 years and was a State Senator at the time she was on the Committee. The next person Mike recognized was George Miller who has recently retired from USOE. Although George has not been an Executive Member of the Steering Committee, he has been involved with distance education at UEN since its inception.

### **Committee of the Whole**

#### **Tab 6 –UEN Legislative Update**

Mike Petersen reported on the key developments that have happened so far in this Legislative Session. There is now a total of \$908,000 in the net reduction of funds, of this amount \$710,000 is one-time funding. Mike shared that to date UEN has reduced their staff by 9 FTEs since September, 2008. Three Network Operations Center staff were just relieved of their duties this last week. Because the network is still so highly reliable, UEN continues to look at ways to prolong the use of our existing hardware, reduce travel expenses and look at ways to reduce supplies budgets.

Representative Kory Holdaway is sponsoring legislation (HB 287) to authorize UEN to allow city and county governments to access the network to back up data and perform disaster recovery activities at a secure data center. This bill has passed through the House and is now in the Senate.

Christine Kearn had a handout ready to share with the Committee regarding the federal stimulus package. The handout provided a breakdown of how the funds were to be spent and she did share that there would be a number of ways that this money would be received.

### **Tab 7 – E-Rate Update**

Lisa Kuhn reported that our application deadline was last Thursday, February 12th. We have signed 10 new contracts this year to provide service to Head Starts, Elementary and Charter Schools. In summary, UEN filed for approximately \$15.7 million net E-Rate dollars for Fiscal Year 2010.

### **Tab 8 – UEN-TV Update**

Nate Southerland gave an update on the digital television transition. As most people are aware, the original date for the conversion was scheduled for February 17, 2009, but the U.S. House of Representatives passed a bill to delay the digital transition until June 12, 2009. There were widespread reports about the unpreparedness for the transition and concerns about the FCC's converter box coupon program. The Utah Broadcasters Association announced their intent of having the Salt Lake market move ahead with the transition but then decided to delay their analog shutoff until June 12th.

UEN has been working to identify and educate UEN-TV viewers who will be affected by the DTV transition. Recent efforts have included outreach to senior citizen center directors and aging programs in Box Elder, Cache, Davis, Salt Lake, Utah and Weber counties. Nate had a short "infomercial blip" that was geared towards senior citizens and how confusing this whole process can be. For a look at UEN's Block Schedule please see Tab 8 Attachment A.

### **Tab 9 – 10 Gigabit Internet and WAN Circuit RFP**

Dennis Sampson and Barry Bryson updated the Steering Committee on the Gigabit Internet, Backbone and WAN Circuit RFP's. UEN received 17 proposals from a variety of telecom/ISP Providers. After the initial RFP evaluations, UEN issued a best and final offer for Box Elder School District and the Salt Lake County Libraries in December.

For a complete breakdown on who the specific contracts were signed with and for what services, please refer to Tab 9.

### **Tab 10 – NETA Award for Water Wise Utah**

Lisa Cohne gave a brief history of the Water Wise Utah Partnership. Laura Hunter shared with the Committee that UEN did receive a national award for Community Engagement with the Water Wise Utah Partnership. To see a copy of the news release please refer to Tab 10 Attachment A.



### **Tab 11 – Network Performance Metrics**

Troy Jessup reported on the string of 9's that UEN continues to achieve.

### **Tab 12 – Steering Committee Meeting Minutes**

**A motion was made and seconded to approve the minutes as corrected. THIS MOTION CARRIED.**

### **Tab 13 – Other**

The next Steering Committee meeting will be held on April 17, 2009, at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

### *Utah Education Network Instructional Services Subcommittee Meeting Minutes*

**Attendees:** Scott Allen, Kenning Arlitsch, Rick Cline, Lisa Cohne, Rich Finlinson, Cyd Grua, Laura Hunter, Vince Lafferty, Pat Lambrose, Gail Niklason, Nate Southerland, Jo-Ann Wong.

### **Tab 14 – Youth in Custody Datacasting Project - Discussion**

Laura Hunter reported that this three-year YIC project has concluded and explained it had been a research and development study on a federal level, developing a throughput for UEN media assets to 13 Utah secure juvenile detention sites. Teachers were provided a server and teacher trainings that covered pedagogical as well as technical aspects of using digital media in their classroom. The teachers participating in this project expressed gratitude for the content and equipment. The grant also allowed UEN to bring the Utah Collections Multimedia Encyclopedia to modern protocols and develop the Utah Metadata Application Profile. UEN learned of technical requirements and limitations of datacasting that it will use in future projects, notably, the PBS EDCAR project.

### **Tab 15 – Distance Education Catalog and Course Scheduling - Discussion**

Rick Cline said 856 DE courses had been scheduled and delivered for 2007-08 and 736 DE courses to date for 2008-09. The number of 2008-09 classes will be close to 856 after the summer term is scheduled. He reminded the subcommittee that the DE catalog can be viewed at [www.uen.org/decatalog](http://www.uen.org/decatalog). The committee discussed changes in the USOE course number system.

### **Tab 16 – Sunset Services - Action**

Three interactive science-related web projects, “ExplorA-Pond,” “Shadow A Swan,” and “Utah’s Stream Connections,” had been developed in a code base that is no longer supported and can’t be moved to the new server without significant software revisions. It was recommended that the subcommittee give final approval to terminate these services effective March 9, 2009. Vince Lafferty moved and Gail Niklason seconded that these projects be terminated. The motion passed to terminate.

### **Tab 17 – WIMBA Service Update - Discussion**

Scott Allen said that 10,386 participant hours were logged by WIMBA Classroom users during October – December, 2008. WIMBA has been rolled out to both K-12 and higher education. Pat Lambrose said WIMBA is exciting and that she has been conducting trainings within the Salt Lake City school district. She has seen 4th grade math classes and book exchanges between classrooms using WIMBA. Another endorsement came from a special education educator and how it allows a student to participate from home via WIMBA. Discussion included Utah State Office of Education’s estimate that WIMBA would save it \$80,000 in travel costs and \$132,000 annually by increasing productivity from reduced travel time. More detail on cost savings estimates is included in the tab.

### **Tab 18 – Public Education and Higher Education Advisory Committee Reports - Discussion**

The Public Education Advisory Committee met February 5, 2009 via WIMBA.

A Higher Education Advisory Meeting was not scheduled. Cyd Grua reminded the subcommittee that it should give this group challenges and action items rather than hearing UEN reports. Gail Niklason suggested that the higher education committee and other sectors on the campuses begin considering alternatives to Blackboard. Laura Hunter suggested STEM projects, addressing teacher shortages, arts education, and resources as issues the higher education advisory committee might address. Rich Finlinson added the group might begin discussion on what local input it could have on an upcoming federal stimulus package. Cyd will take these suggestions into account when scheduling meetings and planning the agendas. The meetings are likely to occur over WIMBA.

### *Utah Education Network Technical Services Subcommittee Meeting Minutes*

**Attendees:** Barry Bryson, Jeff Egly, Eric Hawley, Stephen Hess, M.K. Jeppesen, Gary Koeven, Lisa Kuhn, Don Mahaffey, Eric Mantz, Casey Moore, Bryan Peterson, Kevin Quire, Dennis Sampson, Glen Taylor, Bruce Todd, Ray Walker.

**Tab 19 – Idaho Sponsored Education Group Participation (SEGP) Program - Discussion**

There is an emerging regional optical network (IRON) that was spearheaded by the CIO of Idaho National Labs, located outside of Idaho Falls, ID. They have a need to get to Boise where they can connect to their national network. IRON has begun to expand and pull in other universities in the state such as Boise State, University of Idaho and also Washington State University. They have not been able to get Idaho State University to join yet.

A second entity to emerge is the Idaho Education Network. This is a legislative concept right now and is a project of the State Department of Education. They recently did an RFP (Response for Proposal) for services. But that network, as of now, is not yet officially funded.

We were approached by IRON about two months ago and asked if we, UofU/UEN, would sponsor IRON as a state education network for Idaho. University of Utah and UEN have been working with IRON to provide Internet2 connectivity through the Sponsored Education Group Participation (SEGP) to public and higher education in Idaho. The University of Utah and UEN recently endorsed IRON's application for the Idaho SEGP status. The University of Idaho has provided a requisite letter of support as an in-state I2 university member.

UEN/UofU have received a letter of intent from IRON assuring that IRON will cover any associated fees incurred through our sponsorship

**Tab 20 – Northrop Grumman Corporation - Discussion**

Because of UEN's relationship with Front Range GigaPop (FRGP) and as the connector of record, when anyone comes in to that territory, we have the responsibility to get them hooked up.

Internet2 provides two separate connections, two separate services. One is the typical Internet2 community IP connectivity. The other is a new service that is the Internet2 Dynamic Connection Network (DCN). What makes the DCN unique for us, is that instead of putting it in here and having it come to the same POP at the Level 3 location we have here, it was placed in Colorado and goes to the Level 3 connection in Colorado and ties in Northrop Grumman to the their Louisville location. It has been up and working for a couple of months. Internet2 has been very careful in making sure we have been involved in this.

This becomes an opportunity for us, as the connector of record, to assist Northrop Grumman in putting this in but also moving our connections to 2 by 2½ Gbps capacity – one being the DCN connection and the other being the IP connection in Salt Lake City. Northrop Grumman will be picking up the difference in cost which is about \$90,000 a year and some incidentals. We are not splitting the funding with our partners in Colorado but they are benefiting, as they will have access to a higher capacity. We plan to upgrade this connection again to 10 Gbps later this spring.

We have this opportunity because we are the connector of record and because Steve Corbató is a well respected member of the Internet2 community. Northrop Grumman is interested in doing this for data center redundancy. It is cost positive for us.

Going to the 10 Gbps link we will have 10 Gbps for Internet2 and three 10 gig links for around the state. We will also have the opportunity (if things work out) to use 10 gig links in California or Colorado or other places, if not to carry our internet load, at least to give us a good back up when we drop connectivity. We will also be able to offer backup to Idaho, Colorado or other of our partners.

UEN continues to support and to work with the University of Utah on the project.

### **Tab 21 – NLR Outages and Internet2 CPS Service – Discussion**

During the first week of February, UEN's National Lambda Rail (NLR) had three separate and distinct outages. At 1:00 a.m. on Sunday, February 1st, the network was down for 64 hours. It took NLR twelve hours to diagnose the issue. The problem was due to a bad transponder card located in Ogden. A new card was not received until two days later. Fortunately, the week previous to the outage, we had been working to get Internet2's commercial peering service (CPS) ready and brought the link up on Monday morning. CPS is comparable to NLR Transit Rail and this got us through the outage without any issues.

The second outage occurred on the night of Wednesday, February 4, 2009. This outage was due to optical card issues in Denver. The issue was resolved through software reconfiguration of power levels. The CPS was up during this outage as well.

The third outage was the shortest but the most damaging outage. The outage was at a central switch located at Level 3 that Cenic manages for UEN. The switch basically locked up and we lost NLR, Transit Rail, Internet2, CPS and Cogent. The issue was resolved through a power reset of the switch. Cenic manages this switch and holds the maintenance agreement on it. UEN does not have any spares for this switch to get it back up quickly.

One of the updates UEN would like to do when we get the last Internet RFP is to take the Level 3 hub out of the mix for internet. In the summer we are turning up the Cogent link and moving the Internet out of the Level 3 hub.

### **Other Items**

Troy Jessup and Jim Stewart worked with Human Resources on the reduction in force (RIF) we went through on Tuesday. After reviewing the VOC and NOC departments, it was noted that the VOC received the biggest percentage of calls. Three employees from the NOC were let go with three months severance pay and benefits. Jim asked if anyone is hiring to please contact him.

May is looking like a possible time frame to hold the Technical Retreat Planning meeting.

COMMITTEE OF THE WHOLE

T A B **28**  
OTHER



## COMMUNICATION STRATEGIES - DISCUSSION

### Issue

---

Every educator and leader, every student or engineer can benefit from effective communication techniques. Rich Finlinson from UEN’s Public Information and Communications Department will lead a discussion on ten ideas that can improve the meaningful exchange of information and the development of relationships which foster interaction.

### Background

---

Since UEN values include caring, leadership, integrity, service and communication, the following information is relevant as “we network to create educational opportunities, connect people and collaborate with partners in serving Utah communities.”

The Pattonville School District in St. Ann, Missouri, recently received national recognition for its *10 Commandments of Communication*. In reviewing this list of ideas, UEN staff was impressed with how much these concepts are a part of our UEN culture, particularly in community impact activities.

Using photos from the recent meeting of the Utah Coalition for Educational Technology, this brief presentation and discussion will supply the missing information in the following list:

1. \_\_\_\_\_ often and early.
2. Communicate \_\_\_\_\_ when possible.
3. Develop \_\_\_\_\_ within your \_\_\_\_\_.
4. Start with \_\_\_\_\_ to be your ambassadors.
5. Insist on exemplary \_\_\_\_\_ for all \_\_\_\_\_.
6. Help \_\_\_\_\_ understand the importance of their role in the \_\_\_\_\_ process.
7. Be \_\_\_\_\_ and to the \_\_\_\_\_.
8. Never \_\_\_\_\_.
9. Do a \_\_\_\_\_.
10. Develop a \_\_\_\_\_ plan.

## Recommendation

---

This is an information item and requires no further action by the committee.



# INTERACTIVE VIDEO CONFERENCING - INTELLECTUAL PROPERTY AND PRIVACY ISSUES RELATED TO IVC RECORDING AND STREAMING - ACTION

## Issue

---

Since the transition of UEN's video network from its closed legacy platform to an open IP based solution, the system provides improved access to sites and curriculum, in addition to the ability to record IVC events and play them back to anyone with network access. The issue regarding the protection of intellectual property has been brought to UEN and the Instructional Services subcommittee in the past. More recently privacy has become a concern as it relates to the recording and playback of minors.

## Background

---

UEN's legacy EDNET network was a closed network with access to distance education events made possible only through coordinated scheduling and limited by the number of dedicated circuits on the video backbone to a region and the last mile to the school. If a teacher or facilitator wanted to record an event they recorded it locally on a VCR, or in the event of a network outage the UEN Technical Operations Center would record the event and mail a copy of the recording to the site that missed the event. Playback of the event was limited to the classroom.

Today with H.323 IP based video, VCRs or digital video recorders (DVRs) designed for standard video programs cannot record an IVC event and capture both the video and content streams (Dual Stream). However, solutions for recording IVC events are available and are installed and in use at the Dolores Doré Eccles Broadcast Center, regional hubs and college campuses. These solutions provide the means for simultaneously recording multiple IVC events at the same time for storage and playback at a later time to an IVC classroom endpoint or streamed to a desktop.

To help address the intellectual property concerns as it pertains to higher education, pin codes sometimes have been added to recorded events so the instructor can determine who can view the content. But additional efforts may be required in both higher education and public education to insure that the necessary permissions have been provided before recording the event and that the proper steps have been taken to protect this content once recorded.

The second issue which has recently risen to the surface is a policy issue/question regarding the recording and playback of content that includes minors. UEN has received inquiries regarding this issue and received requests for privacy policy statements

but UEN must defer this issue to the Utah State Office of Education. Any current or developed policy must be shared with the entire distance education community in Utah since higher education IVC events often include minors. In addition UEN must understand how to apply this policy when it receives requests for recording and/or streaming events.

In this month's PEAC meeting a few districts shared student waivers that must be signed by parents before students can be included in online content. This may present a challenge to UEN IVC administrators and staff if each district maintains a different policy and position regarding privacy.

It is assumed that any privacy policy would also affect other forms of recording and streaming such as web conferencing (Wimba).

These questions have been posted at the WCET Online Community in order to gain other perspectives from around the nation.

## **Recommendation**

---

UEN requests a recommendation from this committee regarding how to proceed.

**MY.UEN PREMIUM SERVICES - ACTION****Issue**

---

At the Public Education Advisory Committee meeting on April 2, some members expressed concern about a category of educators who are not able to get premium status for their my.UEN account – usually subcontractors or long-term substitutes working with the K-12 districts. This item summarizes the issues for committee discussion.

**Background**

---

The Utah Education Network has implemented an authentication process limiting access to “premium” services to only those my.UEN registered users who have a verified Utah education email domain (e.g. *@jordan.k12.ut.us* OR *@tooelesd.org* OR *uvu.edu*) associated to their my.UEN record. If you choose to register with your personal email address (e.g. *@yahoo.com* or *@gmail.com*) we cannot identify you as a Utah educator and therefore cannot give you “premium” services.

Previously, anyone with a valid email address, including educators from outside of Utah, could register at my.UEN and access all of the Utah Education Network’s tools and services. This posed a problem because some of our license agreements specifically limit access to Utah students and educators.

UEN’s Tiered Services implementation provides all users access to UEN’s “basic” services while limiting access to “premium” services to only those registered users associated with Utah education.

Currently, anyone can create a my.UEN page and use the basic services including the suite of tools such as Lesson Plan Builder, Rubric Tool, *www.Activities* hotlist, and limited document storage. You do not need a Utah school/institution email address to use UEN’s basic services. Any verified email address will work.

Due to licensing restrictions, only educators with a valid Utah email domain name are promoted to premium users. UEN’s Premium services include:

- Create Adobe PDF Online
- Educator home access to K-12 Pioneer Library (school general access remains the same)
- 200 MB of document storage on my.UEN
- Wimba Classroom

## Recommendation

---

It is UEN's recommendation that long term substitutes or district subcontractors first go to their local education agency to obtain a valid district or institution email address. In rare cases, UEN can verify certain users and promote them to premium status by request, and only for the period they are working for the district/institution.

## PUBLIC EDUCATION AND HIGHER EDUCATION ADVISORY COMMITTEE REPORTS - DISCUSSION

### Issue

---

Doug Jones, representing the Public Education Advisory Committee and Cyd Grua representing the Higher Education Advisory Committee will provide an update on recent committee activities.

### Background

---

Members of the Public Education Advisory Committee met via Wimba online conference system on April 2. Doug Jones facilitated the meeting where the following topics were discussed:

- UEN updates
- Professional development
- Intellectual property – privacy for distance education events
- Current projects
- USOE updates

A Higher Education Advisory Meeting was not scheduled during this period. Cyd Grua welcomes input regarding this committee. The next meeting of the Public Education Advisory Committee is June 4, 2009. Contact Doug Jones or Cyd Grua for more information or to participate.

### Recommendation

---

This is an information item and requires no further action by the committee.



## NETWORK OPERATIONS CENTER TIER 1 AND VIDEO OPERATIONS CENTER CONSOLIDATION - DISCUSSION

### Issue

---

UEN Technical Service has consolidated the Network Operations Center (NOC) Tier 1 and Video Operations Center (VOC).

### Background

---

UEN Technical Service has consolidated the NOC Tier 1 and VOC to form a Technical Support Center (TSC). As of March 1, 2009, all network and video (IVC) related questions, concerns and problems are now directed initially to the Technical Support Center Tier 1 staff. Calls are now routed through a centralized single support number and automated phone system.

Reasons for consolidation of these departments:

- Single initial point of contact; stake holders call one number and reach one department to originate service requests.
- Consolidation of resources to realize greater staff efficiency.
- Budget issues/Cost reductions.
- All Tier 1 staff now report to a single manager.
- NOC tier 1 responsibilities assumed by VOC Tier 1 staff, creating TSC Department.
- Expanded staff coverage hours.

### Recommendation

---

This is an information item and requires no further action by the committee.





## TECHNICAL SUMMIT - DISCUSSION

### Issue

---

UEN Technical Summit Announcement.

### Background

---

UEN is holding its annual Technical Summit this year at the University of Utah from June 9th thru 11th. This summit will feature presentations, panel discussions, and workshops given by technical experts from around the state. We are putting together a strong agenda and believe this conference will be the most successful to date. Based on past summits we are expecting approximately 125 attendees.

The cost for attending the summit will be \$80.00 per person. Registration and further details can be found at <http://summit.uen.org>

### Recommendation

---

This is an information item and requires no further action by the committee.

